सं 0 1

नई दिल्ली, शनिवार, जनवरी 5, 1985 (पौष 15, 1906)

PUBLISHED BY AUTHORITY

No. 1]

NEW DELHI, SATURDAY, JANUARY 5, 1985 (PAUSA 15, 1906)

इस भाग में भिन्न पृष्ठ तंस्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके [Separate paging is given to this Part in order that it may be filed as a separate compilation]

भाग गा-खण्ड 2 PART III—SECTION 21

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइमों से सम्बन्धित अधिसचनाएं और नोटिस

[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 5th January 1985 ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below:

Patent Office Branch Todi Estates, 3rd Floor, Lower Parel (West), Bombay-400013.

Telegraphic address "PATOFFICE".

Patent Office Branch, Unit No. 401 to 405, 3rd Floor, Municipal Market Building, Saraswati Marg. Karol Bagh, New Delhi-110 005.

Telegraphic address "PATENTOFIC".

Patent Office Branch, 61, Wallajah Road, Madras-600 002.

Telegraphic address "PATFNTOFIS". Patent Office, (Head Office), 214, Acharya Jagadish Bose Road, Calcutta-700 017.

Telegraphic address "PATENTS": 1-397G1/84

The States of Gujarat, Maharashtra, and Madhya Pradesh, and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and Union Territories of Chandigarh and Delhi.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Amindivi Islands.

Rest of India.

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees—The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Offices or by bank draft or cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

APPLICATION FOR PATENT FILED AT THE HEAD OFFICE 214, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-17

The dates shown in crescent brackets are the dates claimed under Section 135, of the Act

29th November, 1984

824 Cal 84. Unilever PLC. A process for modifying the organo léptic properties of a foodstuff or an ingredient for a foodstuff. [10th February, 1982]

### 30th November, 1984

- 825|Cal|84. McDermott International, Inc. Conductor guide system for offshore drilling platform.
- 826 Cal 84. Nauchno-Issledovatelsky Institut Plasticheskikh Mass Imeni G. S. Petrova Nauchno-Proizvodstvennogo Obied-Inenia "Plastmassy". Process of separating poly-carbonate from its solution.
- 827|Cal|84. Armour Pharmaceutical Company. Process for purifying factor VII : C.

# 1st December, 1984

- 828 | Cal | 84. Punya Brata Chaudhuri. A method of heat recovery in batch digesters.
- 829 Cal 84. General Electric Company. Capacitor with dielectric comprising polyfunctional acrylate polymer, method of making, and compositions useful therein.
- 830 Cal 84. General Electric Company. Miniaturized monolithic multi-layer capacitor and apparatus and method of making.
- 831|Cal|84. Veb Schwermaschinenbau "Karl Liebknecht" Magdeburg. Process and equipment for the multiphased refining of organic wastes.

### 3rd December, 1984

- 832 Cal 84. United Technologies Corporation. Method for the machining of composite materials.
- 833 Cal 84. Beloit Corporation. Extended nip press.
- 834|Cal|84. Hoechst Aktiengesellschaft. Process for the manufacture of water soluble phthalc-cyanie dyestuffs. [16th May, 1984].

#### 4th December, 1984

- 835 Cal 84. Etablissement Public dit. Solid-fuel boiler.
- 836 Cal 84. Beloit Corporation. Web tension load cell.

### 5th December, 1984

- 837 Cal 84. The Pabcock & Wilcox Company. Sonic apparatus and method for detecting the presence of a gaseous substance in a closed space.
- 838|Cal|84. McDermott International, Inc. Variable capacity barge and method of increasing barge capacity.
- 839 Cal 84. Carrier Corporation. Method and apparatus for controlling refrigerant flow in a refrigeration system.
- 840 Cal 84. Carrier Corporation Method and apparatus for controlling a refrigerant expansion valve in a refrigeration system.
- 841|Cal|84. Carrier Corporation. Control apparatus for centuifugal compressor.
- 842|Cal|84 Carrier Corporation. An incrementally adjustable electronic expansion valve.
- 843|Cal|84 Carrier Corporation. A control system for an electronic expansion valve in a refrigeration system.
- 844|Call84. Pressels Pvi Itd. Waste heat recovery device for small scale sugar mills.
- APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BOMBAY BRANCH AT TODI FSTATES. 3PD FLOOR, SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-400 013

# 29th October, 1984

- 301|Rom|84. Krishnan Krishnamurthv. "Improvements in or relating to cement manufacturing plant and process"
- 302|Bom|84 Hindustan Lever Limited. "Liquid Scouring Composition." .[31st October, 1983].

# 31st October, 1984

303 Bom 84 Raiendra Padmakant Dalal. "A Perpetual Motion Engine."

### 2nd November, 1984

- 304|Bom|84. Mr. Ravi Kumar Goyal. "Double-sided Tooth-brush."
- 305|Bom|84. Karsan Ramji Bhai Dholaria. "A device to measure speed of diesel engines."
- 306 Bom 84. Karsan Ramjibhai Dholaria. "A device to increase efficiency of a strainer of foot valve."
- 307|Bom|84. Oscar Vila Mascot. "Improved Circuit Breaker Panels with Alarm System."
- 308|Bom|84. Oscar Vila Mascot. "Improved Circuit Breaker Indicator."

### 6th November, 1984

- 309 Bom 84. Hindustan Lever Limited, "Manganese Adjuncts. Their Preparation and use." 18th November, 1983].
- 310|Bom|84. Harischandra Kashinath Karve. "A cable operated Locking Mechanism."

### 7th November, 1984

- 311 Bom 84. Harischandra Kesrinath Mhatre and Kanchan Harischandra Mhatre. "A novel locking mechanism for gas pressure regulator or a connector for liquefied petroleum gas cylinder."
- 312|Bom|84. Shiv Kumar Bhide. "An improved cyclone furnace."
- 313 Bom 84. (i) Himanshu Vaidya, and (ii) Avinash Diwan "A cap for dispensing viscous and semi-viscous liquids from containers, such as, bottles, and the like."
- 314 Bom 84. Shlomo Pinto. "A method and device for insulation of the ground."

# 9th November, 1984

- 315|Bom|84. M|s. Camphor and Allied Products Limited. "A process for the granulation of menthol."
- APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH,

# 61, WAI LAJAH ROAD, MADRAS-600 002

# 19th November, 1984

- 887 Mas 84. The Fertilisers and Chemicals, Travancore Limited. Improvements in or relating to the production of wet process phosphoric acid.
- 888 Mas 84. The Fertilisers and Chemicals, Travancore Limited. A process for reducing the hydrogen fluoride content in wet process phosphoric acid by converting into the silicon compounds.
- 889|Mas|84. Allied Tube & Conduit Corporation. Conduit coupling asseembly.
- 890 Mas E4. Kyorin Pharmaceutical Co. Ltd. Proteinaceus substance showing antitumorous action and its preparing method.
- 8911Mcs 84. Sanden Corporation. Scroll type fluid compressor with displacement adjusting mechanism.
- 892 Mas 84. Sanden Corporation. Rotation preventing means for orbiting member of fluid displacement apparatus.

### 20th November, 1984

- 893 Mas 84. Institut Francais Du Petrole. A device for generating acoustic pulses by implosion, inside a well.
- 894 Mas 84. James Gilmor. Fuel Vaporization device for an internal combustion engine.
- 895[Mas]84. Rivermill Investments Pty. Ltd. Building Blocks.
- 896 Mas 84. Union Siderurgidu Du Nord E' De L'Est De La France. Improvement in blast-furnaces in the region of the pouring apertures.
- 897 Mas 84. Richter Gedeon Vegveszeti Gvar Rt. New Azabicyclic compounds and a process for the preparation thereof.

# 2ist November, 1984-

898 Mas 84. Lucas Industries Public Limited Company.

Master cylinder with internal reservoir.

899 Mas 84. D. Bansilal. Can opener device.

900|Mas|84. Sanden Corporation. Scroll type fluid displacement apparatus.

901 Mas 84. V. S. Vasan. An improved electric bulb.

902 Mas 84. Ferring Service Center N. V. DDAVP Antidiuretic and method therefor.

# 22nd November, 1984

903 Mas 84. Sanden Corporation. Seroll type fluid displacement apparatus with shaft supporting mechanism.

904 Mas 84. Sanden Corporation. Scroll type fluid displacement apparatus.

905 Mas; 84. Advanced Energy Concepts, '81 Ltd. Epicyclic transmission utilizing sets of races having differential clearances.

906 Mas 84. Standard Research and Design Corporation. Frameless radial truck.

907|Mas|84. Mastado S.A. Device for prophylaxis and care of tumours, caries and other diseases with notable reduction of pain, by electric and or magnetic pulses.

908|Mas|84. Societe des Produits Nestle S.A. Coffee aromatization.

### 23rd November, 1984

909 Mas 84, Di. C. K. Rajkumar. Manufacture of detergent Cakes by using the unconventional source of energy.

.910 Mas 84. Yanmar Diesel Engine Co. Ltd. Water-cooled diesel engine for outboard motor. (Divisional to Patent Application No. 20 Mas 84).

911 Mas 84. Sturm, Rugar & Company Inc. Inactivating selector arrangement for bolt action firearms.

912 Mas 84. Vortran Corporation Atomizing apparatus.

913|Mas|84. Vortran Corporation. All purpose nebulizer.

914 Mas 84. Vortran Corporation. Single inlet prepackaged inhaler.

915 Mas 84. Vortran Corporation, Gas-powered nebulizer.

# 24th November, 1984

916 Mas 84. Emhart Industries, Inc. Glass forehearth.

917 Mas 84. Dynamit Nobel Aktiengesellschaft. Process for the production of light resistant polyvinyl Butyral foils.

# ALTERATION OF DATE

145720. Ante dated to 16th October, 1975. (2435|Cal|75)

155121. Ante dated to 27th December, 1979. (955|Cal|82)

155134. Ante dated to 15th February, 1979. (761|Del|80)

145527 Ante dated to 15 December 1975.

(1283 | Cal | 76)

145595 Ante dated to 27th Aug. 1975.

(136|Cal|77)

# COMPLETE SPECIFICATION ACCEPTED

Notice is hereby moven that any person interested in opposing the grant of patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition.

The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

"The classifications given below in respect of each specification are according to Indian Classification and International Classification."

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2|- (postage extra if sent out of India). Requisite for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by tour to get the charges as the copying charges per page are Rs. 4<sub>1</sub>-.

**CLASS** : 179 E

145526

Int. Cl.: B 67 f 3 00 & B 65 f 7 00.

### THREADED CLOSURE

Applicant: AMERICAN FLANGE & MANUFACTURING CO. INC., OF 1100 WEST BLANCKE STREET, LINDEN, NEW JERSEY 07036 U.S.A., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A.

Inventor: DAVIS BLAIR DWINELL.

Application No. 2222 Cal 76 filed December 17, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 5 Claims

Container closure comprising a closure receiving member having a cylindrical neck defining a dispensing opening adapted to communicate with the exterior of a container, means formed at one end of said neck for securing said closure receiving member about a container wall opening, a screw thead formation along the fength of said neck, an annular resilient sealing gasket affixed to said neck at a position remote from said dispensing opening, a closure member having an end wall surrounded by a cylindrical sidewall, said sidewall having a screw thread formation in threaded engagement with said neck and an annular gasket engaging surface on said sidewall in sealing contact with said sealing gasket.

Compl. Specn, 9 pages.

Drg. 1 sheet.

CLASS: 104 P

145527

Int. Cl.: C 08 c 17,28; C 08 d 13,28.

A PROCESS FOR RETARDING THE VULCANISATION OF NATURAL AND OR SYNTHETIC RUBBER.

Applicant: BAYER AKTIENGESELLSCHAFT, A BODY CORPORATE ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY OF LEVERKUSEN, FEDERAL REPUBLIC OF GERMANY MANUFACTURERS.

Inventors: 1. PAUL UHRHAN, 2. ERNST ROOS, 3. MANFRED ABELE, 4. RUDIGER SCHUBART 5. THEO KEMPERMANN.

Application No. 2288 Cal 76 filed December 29, 1976.

Division of Application No. 2340|Cal|75 dated 15th December 1975.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 6 Claims

Process for retarding the vulcanisation of natural and or synthetic rubber wherein sulphenamides of the general formula I shown in the accompanying drawings,

in which: R, R<sub>1</sub>, R R<sub>3</sub> are the same or different and represent H, a straight-chain or branched-chain alkyl radical with 1 to 24 carbon atoms, a cycloalkyl radical which contains from 4 to 10 ring carbon atoms and which may be substituted by straight-chain or branched alkyl radicals with 1 to 12 caerbon atoms or by aryl radicals containing 6 or, 10 carbon atoms; an aryl radical with 6 or 10 ring carbon atoms which may be substituted by alkyl radicals with 1 to 6 carbon atoms or by chloring or bromine, cyano or nitro groups or aromatic acyl radicals with 7 or 11 carbon atoms, a nitrile groups, chlorine or bromine or aliphatic acyl radicals with 1 to 10 carbon atoms or aromatic acyl radicals with 7 or 11 carbon atoms, a carboxylic acid ester group with 1 to 4 carbon atoms in the alcohol component, an alkoxy radical with 1 to 6 carbon atoms; acyloxy radicals whose aliphatic carboxylic acid component contains 1 to 10 carbon atoms whose aromatic carboxylic acid component contains 7 or 11 carbon atoms, or a heterocyclic radical with 5 to 10 ring carbon atoms which in addition to carbon, may also contain 1 or 2 oxygen, nitrogen or sulphur atoms and which may optionally be substituted by alkyl radicals with 1 to 6 carbon atoms or aryl radicals with 6 or 10 carbon atoms produced by the addition of N-chlorothiophthalimide with compounds containing one or two olefinic double bonds are incorporated into a rubber before or at the same time as the other constituents in effective amounts in a manner known per se.

Corapl. Specn. 16 pages.

Drg. 1 sheet.

CLASS: 109 & 178

145534

Int. Cl.: B 28 d 5 00.

DIAMOND WITH INSCRIPTION.

Applicant & Inventor: KAZUMI OKUDA, A JAPANESE SUBJECT, OF NO. 55-12-807, 2-CHOME, SANGEN-JAYA, SETAGAYA-KU, TOKYO, JAPAN.

Application No. 581 Cal 76 filed April 2, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 7 Claims

A diamond with inscription, comprising a diamond gem structure having an outer surface cut and polished into a specific shape and a microscopic inscription formed at a specific position on the outer surface of said diamond gem structure, said inscription having a pattern indicating the results of expert appraisal of the diamond gem structure.

Comp. Specn. 13 pages.

Drgs. 2 sheets.

CLASS: 104 F

145537

Int. Cl.: B 29 h 19|02.

AN IMPROVED METHOD AND APPARATUS FOR THE RECOVERY OF VULCANISED ELASTOMERIC MATERIAL.

Applicant: DUNLOP LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF GREAT BRITAIN, OF DUNLOP HOUSE, RYDER STREET, ST. JAME'S LONDON, S.W. 1, ENGLAND.

Inventor: BENNETT WILLIAM DOUGLAS.

Application No. 1795 Cal 76 filed September 28, 1976.

Conventional date 8th October, 1975 U.K. (41173|75)

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 32 Claims

A method for the recovery for re-use of vulcanised elastomeric material from a surface of an article comprising said material, the method comprising briefly raising said surface to a high temperature at atmospheric pressure and subsequently removing heattreated elastomeric material from said surface by applying to the said heat-treated surface a tool which has a scraping, rasping or chopping action on said surface.

Compl. Specn. 24 pages.

Drg. 7 sheets.

CI.ASS : 139 D

145538

Int. Cl.: C 01 b 1 00.

A DEVICE FOR GENERATING HYDROGEN.

Applicant: COMPAGNIE GENERALE D'ELECTRI-CITE, A FRENCH COMPANY, OF 54, RUE LA BOETIE, 75382 PARIS CEDEX 08, FRANCE.

Inventor: JACQUES FALLY.

Application No. 1493 | Cal | 76 filed August 16, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 19 Claims

A device for generating hydrogen comprising: a steam duct; means for introducing steam into the steam duct; means for heating the steam contained in the duct to a temperature sufficient for decomposing at least some of the steam into hydrogen and oxygen; an oxygen passing steam into hydrogen and oxygen; an oxygen passing membrane forming at least part of the wall of the steam duct, said membrane being constituted by zirconia doped by yttrium ovide (Y<sub>2</sub>O<sub>3</sub>) to obtain the passage of oxygen ions through the membrane and by iron oxide (Fe<sub>3</sub>O<sub>4</sub>) to obtain the return conduction of electrons through the membrane; means for maintaining a reduced oxygen pressure on the side of membrane exterior to the duct to cause oxygen to leave the duct by passing through the membrane; and means for collecting the hydrogen remaining in the duct.

Compl. specn. 13 pages.

Drg. 1 sheet.

CLASS: 116-G, 127-B & 166-B

145555

Int. Cl. F 16 c 3 06 & 11 04.

EQUIPMENT FOR REMOVING THE CRANKSHAFT OF AN INTERNAL COMBUSTION ENGINE.

Applicant: SOCIETE D'ETUDES DE MACHINES THERMIQUES—S.E.M.T., A FRENCH BODY CORPORATE, OF 2 QUAI DE LA SEINE, 93202 SAINT DENIS, FRANCE.

Inventors: 1. JACQUES, 2. ERNEST, 3. MAURICE FROELIGER.

Application No. 1547 Cal 75 filed August 7, 1975.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 4 Claims

Equipment for removing the crankshaft of an internal combustion engine, said engine being normally maintained in place on a base or supporting structure by means of supports secured to the frame of said engine, characterized in that at least two of said supports are hinged supports or temporarily replaced by hinged supports, said hinged supports forming part of said equipment, the hinge axles of which are in alignment, spaced apart on a side of said engine and parallel to the rotation axis of the crankshaft, so that said engine may be tilted on a side parallel to said crankshaft to facilitate the removing thereof.

Compl. specn. 8 pages.

Drg. 2 sheets.

CLASS: 160 A & 169 A

145556

Int. Cl.: F41 L 7/02.

ARMOURED ASSAULT VEHICLE OR TANK.

Applicant: SOCIETE ANONYME SECMAFER, A FRENCH COMPANY, OF CHEMIN DES MEUNIERS, 78203 BUCHALAY MANTES, FRANCE.

Inventor: JEAN-JACQUES BOYER.

Application No. 1736 Cal 75 filed September 10, 1975.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 10 Claims

An armoured assault vehicle or tank comprising a central chassis articulated at each of its two ends on a bogic chassis by a transverse shaft and a longitudinal shaft, with at least one monitoring device acting between the central chassis and the chassis of one of the bogies for controlling the relative transverse slope of the central chassis relatively to the bogic chassis, in which at least the gun turret of the armoured assault car is mounted on the central chassis whilst being articulated to pivot about an axis transverse to the longitudinal axis of the central chassis with means for monitoring the relative longitudinal slope between the gun turret and the central chassis.

Compl. specn. 10 pages.

Drg. 5 sheets.

CLASS: 32F + 2 + 2a.

145558.

Int. Cl.: C 07 c 79 10.

PROCESS FOR THE PREPARATION OF 4, 4'-DINITRO-DIPHENYL CARBONATE.

Applicant: BAYER AKTIENGESELLSCHAFT, A BODY CORPORATE ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY OF MANUFACTURERS.

Inventors: 1. JAN MAZANEK 2. JOHANNES BLAHAK

DIETER ARLT.

Application No. 1827 Cal 76 filed October 5, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 7 Claims

Process for the preparation of 4, 4'-dinitro-diphenyl carbonate by nitration of diphenyl carbonate, characterised in that nitric acid is added, in the stoichiometrically required amount or in a slight excess, to a sulphuric acid solution of up to 35% by weight diphenyl carbonate in the temperature range between—40 and 40°C.

Comp. specn. 12 pages. Drgs. 1 sheet.

CLASS: 47 B.

145559.

Int. Class: C 10 b 49|10; 3|00.

PROCESS AND APPARATUS FOR THE PARTIAL COMBUSTION OF COAL POWDER.

Applicant: SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., OF CAREL VAN BYLANDTLAAN 30, THE HAGUE, THE NETHERLANDS, A COMPANY ORGANIZED UNDER THE LAWS OF NETHERLANDS, A RESEARCH COMPANY.

Inventor: 1. TEUNIS VAN HERWIJNEN AND 2. CORNELIS JACOBUS PAUL.

Application No. 1938 |Cal | 76 filed October 26, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 14 Claims

A process for the partial combustion of coal powder, in a reactor to produce a gas containing hydrogen and carbon

monoxide the powder being passed while dispersed in a gas from a fluidization vessel to a combustion reactor, in which fluidization vessel the coal powder is fluidized with the aid of fluidization gas flowing through the vessel, in which process the coal powder is discharged from the fluidization vessel via at least one nozzle in a direction that is perpendicular or substantially perpendicular to the direction of flow of the fluidization gas.

Compl. specn. 18 pages. Drgs. 1 sheet.

CLASS: 164 A.

145560.

Int. Cl.: C 02 c 1 06.

PROCESS FOR REMOVING PHOSPHATE FROM BOD-CONTAINING WASTEWATER TO PRODUCE A SUB-STANTIALLY PHOSPHATE-FREE EFFLUENT.

Applicant: UNION CARBIDE CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, OF 270 PARK AVENUE, NEW YORK, STATE OF NEW YORK, 10017, UNITED STATES OF AMERICA.

Inventors: 1. LADISLAS CHARLES MASCH 2. RAY-MOND FRANCIS DRNEVICH.

Application No. 1951 Cal 76 filed October 27, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 13 Claims

A process for removing phosphate from BOD-containing wastewater to produce a substanually phosphate free effluent which comprises: mixing phosphate-containing influent wastewater with activated studge and oxygen-containing gas in a aeration zone and simultaneously circulating one fluid against the other fluid for sufficient duration to reduce the BOD content of said wastewater and cause the microorganisms present in said activate sludge to take up phosphate to form an aerated mixed liquor containing phosphate-enriched sludge; separating said phosphate-enriched sludge from said aerated mixed liquor to provide a substantially phosphate-free effluent; passing said phosphate-enriched sludge to a phosphate stripping zone and maintaining at least 50% of the sludge therein under anaerobic conditions to release phosphate from the phosphate-enriched sludge and form a phosphate-lower sludge and phosphate-enriched sludge and torm a phosphate-lower sludge and phosphate-enriched sludge and torm a phosphate-lower sludge and stripping zone and said phosphate-lower sludge from a lower section of said stripping zone, recycling at least 50% of said phosphate-lower sludge to said aeration zone as said activated sludge; the process being characterised by conter currently stripping released phosphate from the sludge in said stripping zone by the steps of; maintaining a sludge residence time in said stripping zone of from 2 to 10 hours; introducing a low phosphate, low solids stripping medium as herein defined into said stripping zone lower section to upslow through at least para of the settling solids to said stripping zone upper section, whereby the phosphate released from the citling sludge solids is transferred to the upsewing liquid to provide said phosphate-chirched liquid in said stripping zone upper section, said stripping medium having a sepanded solids concentration not exceeding 200mg liter; and maintaining the volumetric flow rate of said stripping medium introduced into said stripping zone between 0.7 and 2.0 times the

Compl. specn. 62 pages. Drgs. 2 sheets.

CLASS: 101 F & 102 D.

145575.

Int. Cl.: F 15 b 1 00.

METHOD AND DEVICE FOR SEPARATING AND COMPACTING FLOCCULATED SOLIDS IN A FLUID SLUDGE.

Applicant: SOCIETE GENERALE DE CONSTRUCTIONS ELECTRIQUES ET MECANIQUES ALSTHOM S.A. OF 38 AVENUE KLEBER, 75784 PARIS CODEX 16. FRANCE FRENCH CORPORATION.

Inventor: ELIE CONDOLIOS.

Application No. 1353 Cal 76 filed July 28, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 17 Claims

A method for separating and compacting flocculated solids in a fluid sludge containing finely divided inorganic substances together with fibrous substances of organic or inorganic origin, wherein the said sludge is slowly stirted mechanically in the top part of a device so that the flakes of the flocculated solids are rotated to increase their size and density, the strring speed being chosen so that the flakes do not disintegrate, these flakes then being pressed by a first mechanical means in an intermediate part of the device towards a first orifice, this pressing not exceeding a certain limit which corresponds to the threshold where the solids begin to compact, a part of the liquid of the sludge separated from between the flakes being allowed to rise, the compressed flakes leaving the first orifice and then being compacted in a bottom part of the device by a second mechanical means with lateral discharge of the liquid, this second mechanical means discharging the said compacted flakes through a second orifice having a cross-section which is automatically adjustable as a function of the thrust exerted thereon by the compacted sludge as propelled by the second mechanical means, the greater the thrust the greater the cross-section.

Compl. specn. 20 pages. Drgs. 4 sheets.

CLASS: 56 C & 39 P.

145576.

Int. Cl.: B01 d 9|02; C01 f 7|74.

PROCESS FOR EXTRACTING AN ALUMINIUM SULPHATE FROM AN IMPURE SULPHUNIC ACID SOLUTION CONTAINING SAID SULPHATE.

Applicant: 1. ALUMINIUM PECHINEY, A FRENCH COMPANY, OF 28, RUE DE BONNEL, 69003 LYON, FRANCE.

Inventors: 1. JEAN-MICHEL LAMERANT, 2. JOSEPH COHEN, 3. PIERRE MAUREL.

Application No. 1802 | Cal | 76 filed 29th September, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 4 Claims

Process for extracting an aluminium sulphate of the formula A1<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>.0.5 H<sub>2</sub>SO<sub>4</sub>.11 to 12 H<sub>2</sub>O from a hot solution resulting from the treatment of an aluminous material such as herein described with a sulphuric acid solution after removal of the treatment residue, the process being characterised by introducing the impure aluminium sulphate-containing sulphuric acid solution resulting from the attack of the sulphuric acid solution on the aluminous material into the first of a series of at least two crystallisers, at a temperature at least equal to that of the first crystalliser, the composition of the solution being such that when heated at the temperature of the said first crystalliser it is in a state of supersaturation, and that the point representing its composition on a diagram whose X-axis (abscissa) corresponds to the percentage of free H<sub>2</sub>SO<sub>4</sub> and whose Y-axis (ordinate) corresponds to the percentage of A1<sub>2</sub>O<sub>3</sub> is located within a triangle whose vertex A is the point representing the precipitated sulphate and whose other vertices B and C have abscissae of 39 and 56% respectively and ordinates of 1 and 0.5% respectively, maintaining the first crystalliser at a temperatures not exceeding 80°C, circulating the suspension from the first crystalliser to the second, and so on, each crystalliser being maintained at a temperature lower than that of the preceding one, the temperature of the last crystalliser not being lower than 15°C, and the residence time of the suspension in each crystalliser being sufficient to obtain therein a concentration of A1<sub>2</sub>O<sub>3</sub> in the form of dissolved aluminium sulphate that is closer to the static equilibrium at the temperature of the crystalliser in question the lower this temperature and finally separating in any known manner the crystals of aluminium sulphate from the solution.

Compl. specn. 10 pages. Drg. 1 sheet.

CLASS: 32F-2-a & 55D-2.

145579.

Int. Cl.: C 07 c 79|38.

A PROCESS FOR THE MANUFACTURE OF N-METHYLCARBANILIC ACID 13-(ETHOXYCARBONY-LAMINO)-PHENYL] ESTER.

Applicant: SCERING AKTIENGESELLSCHAFT, A BODY CORPORATE ORGANISED ACCORDING TO THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, OF BERLIN AND BERGKAMEN, 1 BERLIN 65, MULLERSTRASSE 170-178, FEDERAL REPUBLIC OF GERMANY.

Inventors: 1. DR. FRIEDRICH ARNOT 2. DR. GERHARD BOROSCHEWSKI.

Application No. 128 Cal 77 filed 29th January, 1977.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 2 Claims

A process for the manufacture of N-methylcarbanilic acid 13-(ethoxycarbonylamino)-phenyll ester, wherein chloroformic acid 3-ethoxycarbonylamino-phenyl ester is reacted in a solvent in the presence of an acid binding agent with N-methylamine.

Compl. specn. 12 pages. Drg. Nil.

CLASS: 160-A.

145586.

Int. Cl.: B60 g 3]00.

A CROSS-COUNTRY VEHICLE.

Applicant: SOCIETE ANONYME SECMAFER, OF CHEMIN DES MEUNIERS, 78203 BUCHELAY MAUTES, FRANCE.

Inventor: JEAN-JACQUES BOYER.

Application No. 1130 Cal 75 filed June 6, 1975.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 10 Claims

A cross-country vehicle for all kinds of terain comprising a central chassis at each end of which is articulated, about a transverse axis, a bogie chassis with a jack acting between the central chassis and each bogie chassis to permit regulation of their relative longitudinal inclinations, each bogie chassis having ground engaging supports thereon mounted for rotation about horizontal axis disposed at the front and rear of it for supporting the bogie chassis on the ground, the transverse axis of articulation of each bogie chassis on the central chassis being located at the end of the bogie chassis adjacent to the central chassis and being located above the plane of the axis of said bogie supports, said jack acting between the central chassis and a point near said horizontal axis adjacent to the central chassis which is located below the transverse axis of articulation of the associated said bogie chassis.

Compl. specn. 11 pages. Drgs. 5 sheets.

CLASS: 195-B.

145587.

Int. Cl.: F16 K.

FLUID FLOW CONTROL VALVES.

Applicant: SAUNDERS VALVE COMPANY LIMITED, CWMBRAM, GWENT, NP4 3XX, WALES, A BRITISH COMPANY.

Inventor: 1. GLYN COCKING 2. JOHN OWEN JONES.

Application No. 353 Cal 76 filed February 26, 1976.

Conventional dated 6th March, 1975 (9452|75) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 7 Claims

A fluid flow control valve comprising; a valve casing; an operating mechanism including an axially movable stem extending outwardly of the valve casing; a first annular member coaxial with the stem and coupled to the valve casing; a second annular member coaxial with the stem and coupled to the stem, the first and second annular members being of such a length as to axially overlap in all normal working positions of the stem, the first annular member having an inside diameter greater than the outside diameter of the stem to define a lubricant reservoir where the stem enters the

valve casing; and seal means located between the first annular member and the second annular member to form a seal therebetween.

Compl. specn. 9 pages. Drg. 1 sheet.

CLASS: 144E 6 & 32 E.

145589.

Int. Cl.: C08 j 1 10.

PROCESS FOR THE PREPARATION OF ORGANIC PIGMENTS GRAFTED WITH ORGANIC POLYMERS.

Applicant: BAYER AKTIENGESELLSCHAFT, A BODY CORPORATE ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, OF LEVERKUSEN, FEDERAL REPUBLIC OF GERMANY, MANUFACTURERS

Inventors: 1. HEINZ-PETER HEMERICH, 2. HANS JURGEN ROSENKRANZ.

Application No. 2081 Cal 76 filed November 20, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims

Process for the preparation of organic pigments grafted with organic polymers, characterised in that the pigment is grafted, in the aqueous phase, with at least one organic vinyl monomer such as herein described, in the presence of an anionic or cationic emulsifier such as herein described and of a reducing agent such as herein described.

Compl. specn. 17 pages. Drg. Nil.

CLASS: 32 F1+F2 b.

145595.

Int. Cl.: C07 d 99|24.

PROCESS FOR PREPARATION OF NEW 7-METHO-XY-7-L-UREIDO (THIENYL AND FURYL) ACETAMI-DOCEPHALOSPORINS.

Applicant: E. R. SQUIBB & SONS, INC., A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF LAWRENCEVILLE-PRINCETON ROAD, PRINCETON, NEW JERSEY 08540, UNITED STATES OF AMERICA, MANUFACTURERS.

Inventor: JOSEPH EDWARD DOLFINI.

Application No. 136 Cal 77 filed on January 31, 1977.

Division of Application No. 1658 Cal 75 dated August 27, 1975.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 20 Claims

A process for preparing a compound of the formula IV

of the accompanying drawings wherein Z is O or S; R is H, a group of the formulas shown in Figures 8 to 12,

methylsulfonyl, and pharmaceutically acceptable salts thereof, alkyl esters of 1 to 3 carbon atoms thereof, haloalkyl esters of 1 to 3 carbon atoms thereof, or acyloxymethyl esters thereof wherein the acyl redical is alkanoyl of from 1 to 5 carbon atoms, benzyol or phenacetyl, characterized by reacting a compound of the formula II

wherein Y and Z are as defined above with a compound of the formula V

wherein R is as define above and further reacting the product thereof with an alkali metal cyanate or alkaline earth metal cyanate to form the desired compound of formula IV

and, if desired, converting this compound by methods known per se to the pharmaceutically acceptable salts, alkyl esters, haloalkyl esters or acylexymethyl esters thereof.

Compl. specn. 18 pages. Drgs. 4 sheets.

CLASS: 55 F, 60.X.2.b., 128 G.

In. Cl. A61 b 19 00.

145596.

A METHOD OF PREPARING A TEST DEVICE.

Applicant: MILES LABORATORIES, INC., MANUFACTURERS, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF INDIANA, UNITED STATES OF AMERICA, DOING BUSINESS AT 1127 MYRTLE STREET, ELKHART, INDIANA, UNITED STATES OF AMERICA.

Inventors: 1. KATHARINE GENTRY IOHNSTON 2. JEROME GREYSON

Application No 210, Cal 77 filed February 14, 1977.

Appropriate offiffice for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 13 Claims

A method for preparing a test device which produces a detectable response in the presence of a component in a test sample, wherein the production of said response is terminated after a predetermined time, said method comprising incorporating a carrier matrix with

- (a) a reactant system such as herein described which, upon contact with said sample, interacts with said component to produce the detectable response, and
- (b) an inhibitor system such as herein described which, upon contact with the sample, prevents the reactant system from interacting with the component after elapse of a predetermined time.

Compl. specn. 27 pages Drgs. Nil.

**CLASS: 164A.** 

145611.

Int C1. C02 c 1|02, 3|00.

A PROCESS FOR THE PURIFICATION OF WASTE WATER OR SEWAGE AND APPARATUS THEREFOR.

Applicant TYMFLO PROCESS LIMITED, A COM-PANY ORGANISED AND EXISTING UNDER THE LAWS OF CANADA, OF 4 PLACE VILLE MARIE, SUITE 512, MONTREAL, PROVINCE OF QUEBEC, CANADA H3B 257

Inventor: GEORGF TYPOSHCHUK.

Application No. 1022 Cal 76 filed June 11, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 47 Claims

A process for the purification of waste water or sewage, comprising,

- (i) maintaining a plurality of treatment zones comprising:
- (a) an aerated Activated Sludge (A.S.) zone,
- (b) a submerged aerated Biological Moving Filter Bed (BMFB) zone containing finely divided particulate filtering media, in fluid flow communication with said AS. zone, and
- (c) a submerged non-aerated Biological Stable Filter Bed (RSFR) zone containing finely divided particulate filtering media in fluid flow communication with at least one of said A.S. zone and said B.M. FB zone,
- (ii) feeding waste water or sewage into said zones,
- (iii) circulating said waste water or sewage through said AS 700 and said BMFB zone to produce a biologically treated waste water or sewage within Mixed Liquor Suspended Solids (M.LSS),
- (iv) flowing MISS from (iii) to said BSFB zone and filtering said MLSS in said BSFB. zone,
- (v) withdrawing a purified waste water or sewage from said RSFB zone, and
- (vi) periodically backwashing said RSFR zone to remove the retained solids so as to maintain the operating effectiveness of the B.S.F.B zone and an accept-

able healiess at the point of withdrawal of the purified waste water or sewage.

Compl. specn. 31 pages. Drgs. 14 sheets.

CLASS: 104 C

145612

Int. Cl.: C 08 c 1/06, 7/10.

PRESERVATION OF NATURAL RUBBER LATEX

Applicant THF BOARD OF THE RUBBER RESEARCH INSTITUTE OF MALAYSIA, A MALAYSIAN BODY CORPORATE, OF 260 JALAN AMPANG, KUALA LUMPUR, MALAYSIA.

Inventors: JOHN CHERRAPPATHANATHU KURUVILLA. MUN LAU CHEE, SUM NG CHIEW, RAMA RAO SUBBARAO PUNNAKILMUT.

Application No 1391 Cal 76 filed August 4, 1976.

Conventional date 20th August, 1975 (34686|75) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office. Calcutta.

#### 7 Claims

A method of preserving field latex from coagulation, which method comprises adding to the latex from 0.25% to 0.4% by weight of alkali, and as a secondary preservative a combination of a low molecular weight organic disulphide with zinc oxide of a bactericide.

Compl. Specn. 17 pages.

Drg. Nil.

C'ASS : 136 E

145624

Int. Cl.: B 29 f 1 00.

A PROCESS FOR THE PRODUCTION OF ARTICLES FROM SYNTHETIC MATERIAL AND TO INJECTION MOULDING APPARATUS FOR THE PERFORMANCE OF THIS PROCESS.

Applicant: ANTON ANGER MASCHINENBAU GE-SFLISCHAFT mb.H. OF JAXSTRASSE 9, A-4020 LINZ, AUSTRIA.

Inventor: ANGER ANTON.

Application No 1157|Cal|76 filed June 29, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office, Calcutta

# 15 Claims

A process for the production of an article, which is of synthetic material and which comprises at least one sleeve provided in an end nortion thereof with an internal annular recess having a depth at least equal to the thickness of the well of the sleeve, the process comprising the steps of moulding such article by introducing synthetic material into a mould with a core element the mould and the core element respectively defining the inner and outercontours of the article causing said end portion of the sleeve of the moulded article to be at a temperature at which it is elastic, removing the mould from the outer surface of said end portion while elastic, so withdrawing from said end portion while elastic the part of the core element defining the recess in said end portion that said end portion is elastically deformed from and restored to its moulded shape and then removing the moulded article from the mould.

Compl. Specn. 12 pages

Drg 2 sheets.

CLASS : 32 F 3(a) & 40 F Int Cl : C 07 b 13 02 13 06 145625

PROCESS FOR SUI FONATION WITH GASFOUS SULFUR TRIOXIDE AND APPARATUS THEREFOR

Annlicant · KAO SOAP CO ITD A CORPORATION ORGANISED UNDER THE LAWS OF IAPAN OF 1 1-CHOME NIHONBASHI-KAYABACHO CHUO-KU, TOKYO, JAPAN

Telentors 1 KFIICHI TSUTO . 2. KANJI MAJIMA. 3 SHIGEYASU IMAMURA.

Application No. 1203|Cal<sup>1</sup>76 filed July 7, 1976.

Appropriate office for opposition proceedings Patents Rules, 1672) Parent Office, Calcutta. (Rule 4.

#### 12 Claims

In a continuous gas-liquid reaction process for sulfating or sulfonating liquid organic reactant capable of being sulfated or sulfonated by reaction with gaseous sulfur trioxide, wherein said organic reactant is reacted with gaseous sulfur trioxide to obtain a corresponding sulfated or sulfonated seaction product, the improvement which comprises simultaneously continuously flowing into each of a plurality of separate elongated vertical cylindrical first-tage reaction zones an outer annular stream consisting of stage reaction zones an outer annular stream consisting of said liquid organic reactant and an inner gaseous stream consisting of a mixture of about one to 20% by volume of sulfur trioxide and the balance a gaseous inert diluent, said outer stream being flowed upwardly through and substantially filling an annular space of small radical thickness defined between an outer sulindrical members and a linear stream. defined between an outer cylindrical member and an inner cylindrical member located at the lower end of said first stige reaction zone and said outer stream flowed vertically upwardly into the lower thence being end of said first-stage reaction zone. Said inner stream being flowed vertically upwardly through said inner cylindrical member into said lower and of said first-stage reaction zone said inner and outer streams flowing in concurrent substantially parallel vertically upwardly directed flow into and through being said first-stage reaction zone, the entrety of said inner stream being disposed within said inner cylinder and isolated from said outer stream prior to entry of said inner and outer streams into said first-stage reaction zone, said inner cylinder and content streams into said first-stage reaction zone, said inner and outer streams flowing upwardly through said first-stage reaction zone in gas-liquid contact, said outer stream of liquid reactant forming a continuous thin annular upwardly rising outer liquid film of substantially uniform thickness on the wall of said first-stage reaction zone and extending the entire length thereof, said inner gaseous stream flowing inside of said liquid film upwardly through the entire length of said first-stage reaction zone and having a flow velocity in the range of from about 20 m. sec. to a flow velocity in the range of from about 20 m. sec. to about 120 m/sec., said inner gaseous stream uniformly contacting said annular liquid film over its entire inner surface in said first-stage reaction zone to effect upward movement and mixing of said liquid film whereby the organic reactant and the gaseous sulfur trioxide are mixed and contacted with each other to effect the reaction, and rapidly extracting heat from the resultant reaction mixture as it passes unwardly through said first-stage reaction may upwardly through said first-stage reaction zone;

Continuously removing said liquid streams and said gas Continuously removing said liquid streams and said gas streams from the upper ends of all said first-stage reaction zones and flowing all said streams into the upper end of a single elongated vertical second-stage reaction zone to form a single annular film of said liquid and a single stream of said gas injecting into said gas from outside the system a second gaseous stream consisting of a mixture of about one to 20% by volume of sulfur trioxide and the balance a gaseous inert diluent. Howire said liquid and gas streams in concurrent stricture which the balance are streams in concurrent. the balance a gaseous inert dillient. However said liquid and gas streams in concurrent substantially parallel vertically downwardly directed flow in a substantially parallel vertically through said second-stage reaction zone, said streams flowing downwardly through said second-stage reaction zone in gas-liquid contact with said stream of liquid reactant forming a continuous thin annular downwardly flowing outer liquid film of substantially uniform thickness on the wall of said second-stage reaction zone and extending the entire length second-stage reaction zone and extending the entire length thereof, said gaseous streams flowing inside the liquid film downwardly through the entire length of said second-stage reaction zone and substantially uniformly contacting said annular liquid film whereby the liquid film and the gaseous sulfur trioxide are mixed and contacted with each other to effect the reaction and rapidly extracting heat from the resultant reaction mixture as it passes downwardly through said second stage reaction zone;

separating the liquid phase from the gaseous phase after same have left the bottom of said second-stage reaction zone and recovering the reaction product from the liquid phase.

Compl speen. 24 pages

Drg 2 sheets

CLASS: \$2 B, 56 B & 56 G

145627

Int. Cl. · C 10 g 13 02; 35 04

A COMPROI SYSTEM FOR REGULATING THE 2-397GI/84

HYDROGFN|HYDROCARBON MOLE RATIO IN CONTINUOUS HYDROCARBON CONVERSION I

Applicant: UOP INC.. A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF TEN UOP PLAZA. ALGONQUIN AND M. PROSPECT ROADS, DES PLAINES, ILLINOIS, UNITED STATES OF AMERICA.

Inventor: 1. WALTER ADAM BAJEK. JAMES HERBERT MCLAUGHLIN.

Application No 1299 Call 7.6 filed July 20, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office. Calcutta.

# 18 Claims

A control system for regulating the hydrogen-hydrocarbon mole ratio of the combined hydrogen-charge stock feed in a continuous hydrocarbon conversion process hydrocarbonaceous charge stock is introduced into heating means having heat-supplying means associated there-(2) the resulting heated charge stock and hydrogen are contacted in a catalytic reaction zone. (3) a hydrogen-containing, hydrocarbon effluent stream is withdrawn from said reaction zone. (4) said effluent stream is condensed and separated to provide a vaporous phase and a liquid phase, (5) at least a first portion of said vaporous phase is recycled at increased pressure, via compressive means, to said reaction zone, and (6) a second portion of said vaporous phase is withdrawn from said conversion process via pressure control, said system comprises, in cooperative combination:

- (a) first flow-varying means for adjusting the quantity of heat supplied to said preheating means:
- (b) second flow-varying means for adjusting the quantity of the second portion of said vaporous phase withdrawn from said conversion process;
- (c) third flow-varying means for adjusting the flow of compressed vapotous phase recycled from the discharge of said compressive means;
- (d) a first hydrocarbon analyzer receiving a sample of said hydrocarbonaccous charge stock and develop-ing a first output signal representative of a com-position characteristic thereof;
- (e) a second analyzer receiving a sample of that portion of said vaporous phase recycled to said reaction zone and developing a second output signal representative of the hydrogen concentration thereof;
- (f) means for sensing the pressure of the separated vaporous phase and developing a third output signal representative thereof; and
- (g) comparator means (i) receiving said first, second and third output signals, (ii) comparing the actual value of the composition characteristic of said charge stock and the hydrogen concentration of said vaporous phase and (iii) generating fourth, fifth and sixth output signals;

Said control system being further characterized in that said computer means is in communication with said first, second and third flow-varying means via signal-transmitting means, which transmit said fourth, fifth and sixth comparator output signals thereto, whereby (i) the quantity of heat supplied to said preheating means, (ii) the quantity of said vaporous phase withdrawn from said process and, (iii) the flow of compressed vaporous phase from the discharge of said compression. ous phase from the discharge of said commessive means are adjusted in response thereto and said hydrogen/hydrocarbon mole ratio is regulated

Compl. specn. 53 pages

Drg 2 sheets

CIASS: 40 H & 32 B Int Cl · C 07 c 7112

145637

IMPROVED PROCESS FOR SEPARATING NORMAL AND ISOPARAFFINS.

Applicant: UOP INC A CORPORATION ORGANIZ-FD IN THE STATE OF DELAWARE, WITH ITS PRINCIPAL PLACE OF BUSINESS AT TEN UOP PLAZA—ALGONGUIN AND MT. PROSPECT ROADS DFS PLAINES, ILLINOIS, U.S.A

Inventor: DONALD FEDDOES BROUGHTON.

Application No. 1603'C 176 filed August 31, 1976.

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office, Calcutta,

#### 12 Claims

In a process for the separation of normal paraffins from a feed stream containing a mixture of normal paraffins and isoparaffins alongwith aromatic hydrocarbons which process employs an adsorbent comprising a shape-selective zeolite and comprises the steps of

- (a) contacting soid adsorbent with said feed at adsorption conditions to effect the selective adsorption of normal paraffin and a portion of the aromatic hydrocarbons by the adsorbent;
- (b) removing a raffinate stream comprising less selectively adsorbed isoparaffins from said adsorbent;
- (c) contacting said adsorbent with a desorbent material at desorption conditions to effect the desorption of normal paraffins from said adsorbent;
- (d) removing from said adsorbent an extract stream comprising normal paraffins, and;
- te) passing at least a portion of said extract stream to a separation means and therein separating at separation conditions normal paraffins from desorbent material.

The improvement which comprises using a two-step desorption operation which comprises the steps of:

- (i) contacting at first desorption conditions said adsorbent with a first desorbent material to effect the desorption of said feed aromatic hydrocarbons;
- (ii) removing a first extract stream comprising said feed aromatic hydrocarbons and said first desorbent material from said adsorbent;
- (iii) contacting a second desorption conditions said adsorbent with a second desorbent material to effect the desorption normal paraffins;
- (iv) removing a second extract stream comprising normal paraffins and second desorbent material from said adsorbent; and
- (v) passing at least a nortion of said second extract stream to a separation means and therein separating at separation conditions normal paraffins from said second desorbent material

Compl. specn. 45 pages.

Drg. 1 sheet.

CLASS: 40 A<sub>1</sub> 40 A<sub>2</sub> 32 F

145649

Int. Cl. : C 08 f 3 00 5 100 7 00 &

C 08 d 1|12 3|04 3|06 3|10

A CONTINUOUS VAPOR PHASE POLYMERINATION PROCESS AND A HORIZONTEL REACTOR THEREFOR.

ADDICATE STANDARD OF COMPANY A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF INDIANA, U.S.A. OF 200 EAST RANDOLPH DRIVE CHICAGO ILLINOIS, 60601, UNITED STATES OF AMERICA.

Inventor 1 JOHN WILBERTON SHEPARD, 2 JAMES LOUIS 1671 3 FINNIN FRANCIS PETERS, 4 ROBERT DEAN HALL 5 MICHAEL JEFFRFY SPANGLER, 6 GLENN ODLLI MICHAELS.

Application No. 23°2°Col<sub>1</sub>75 filed December 12, 1975.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Calcutta

# 21 Claims

A continuous vapur phase polymerization process comprisme notion rizing in the vapor phase in one or more horizontal polymerization zones, at least one polymerizable monomer such a basin defined optionally in the presence of bedregen in the presence of catalyst and a stirred particulate release bed in said zone, spraying a readily vaporizable quench liquid such as being defined onto the surface of said stirred particulate polymer bed to control the polymerization temperature by evaporative cooling in said polymerization zone, removing off-giese comprising monomer more and cherch liquid vapor from said polymerization zone to form and off-gas stream; and removing particulate rolymer from said polymerization zone for product recovery.

Compl Specn 45 pages

Drg. 2 sheets.

CI ASS · 108 A; 108 C<sub>2</sub>. Int Cl · C21b I 00 12100

C 22b 5|12

PROCESS FOR THE PRODUCTION OF METALLISED IRON BEARING MATERIAL.

Aprlicant: MET \| I LURGICAL & FNGINEERING CON\$\text{SUITANTS} (\text{IND}(\text{A}) \) I IMITED AN INDIAN COMPANY,
OF RANCHI-2, BIHAR, INDIA, HINDUSTAN
\$TFEI LIMITED (\text{RF} \) FRANCH & DEVELOPMENT), AN
INDIAN CCMPANY, OF RANCHI 2, BIHAR, INDIA
AND DR SAIBAI KANTI GUPT \( A \), PROJECT COORDINATOR OF RESFARCH & DEVELOPMENT,
HINDUSTAN STEEL LIMITED, OF RANCHI 2, BIHAR,
INDIA AN INDIAN NATIONAL.

Inventor CHOWDHITRY SURJA PRASANNA. SEN-GUPTA KALYAM KUMAR. RAO RAMACHANDRA T. R. IYFR SUBRAMANIAM KASINATH. CHAUDHURI PRADIP KUMAR CHAUHAN GUR IQBAL SINGH.

Application No. 1595 Call 75 filed August 14, 1975.

Complete Specification left on November 15, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Calcutta.

### 10 Claims

In a process for the production of metallised iron bearing material from iron-bearing raw material which comprises contacting in a reactor said raw material in counter-current low with a pre-treated reducing gas to reduced such raw material and there frer cooling the reduced material to yield the desired rectallised from bearing material, the improvement which is characterised in subjecting a lean or rich gas produced from coal or cole to cleaning for the removal therefrom or the reduction to acceptable limits of undesirable metre such as CO water, or subnbur (either in elemental or compound form), and thereafter, as desired or required, including the pressure and/or raising the temperature of the gar to pre-determined values such as herein described.

Comp! Speci 18 pages.

Drg. 1 sheet.

CLASS: 40 F

145661

Int. Cl.: C21d 1|00, 9|00

RF4CTOR FOR PRODUCING METALLISED IRON BF4PING MATERIAL

Applicant MFTALI URGICAL & ENGINEERING CON-SULTANTS (INDIA) LIMITED AN INDIAN COMPANY, OF RANCH 2 BIHAR INDIA, AND HINDUSTAN STOFI LIMITED (RESEARCH & DEVELOPMENT) OF RANCHI 2, R'HAR, INDIA AN INDIAN COMPANY,

Inventors - SARMA KONDAMUDI KAMESWARF, GOVIND SWAMI NARAYAN. MOIUMDER DR. RIMAI FNDRA NATH, GIPTA DR SAIBAL KANTI, IYER CUSRAMANIAM KASINATH, CHAUDHURI PRADIP KUMAR AND GUP SINGH IQBAI CHAUHAN

Application No. 1596 Cell'75 filed August 14, 1975

Complete Specification left on November 15, 1976.

Appropriate office for opposition proceedings (Rule 4, Potents Rule 3, 1972) Patent Office.

# 14 Claims

Vicartor for the moduction of metallised iron-bearing material from iron-bearing raw material by reduction such raw material by means of a gas produced from any coal or coak,

which comprises a refractory lined substantially cylindrical reaction vessel the walls of which are formed with a slight downwardly directed batter so that the maximum diameter of the vessel is located at its bottom section, two rows of gas inlets provided at said bottom section of the reaction vessel one of such rows of inlets being for the introduction under pressure of the hot reducing gas and the other for the cold gas as heigh provided at the row of inlets for the hot reducing gas being provided at the position of maximum diameter of the reaction vessel and being formed integrally with the material of such vessel to ensure leak-proofness against the pressurized gas, one or more series of exhaust gas outlets located at the top section of the reaction vessel, a charging system for charging the reaction vessel with iron bearing raw material located at the top of such vessel, and a discharge system such as herein described for the discharge of reduced metallised iron bearing material from the vessel said discharge system being located at the bottom section of such vessel, being adapted to permit uniform descent of the raw material being charged into the vessel without affecting the gas distribution therethrough and being leak-proof to the pressurised gas.

Compl. Specn. 18 pages.

Drg. 1 sheet.

CLASS: 40 F 85 C

145662

Int. Cl.: C21b 7|00

F 27 d 3 00.

IMPROVED CHARGING AND DISTRIBUTING DEVICE FOR BLAST OR SHAFT FURNACE OR FOR SHAFT REACTOR.

Applicant: METALLURGICAL & ENGINEERING CONSULTANTS (INDIA) LIMITED, AN INDIAN COMPANY, OF RANCHI 834002, BIHAR, INDIA, AND DR. BIMALENDRA NATH MAJUMDER, AN INDIAN CITIZEN, SENIOR SUPERINTENDENI (BF), OF METALLURGICAL & ENGINEERING CONSULTANTS (INDIA) LIMITED, RANCHI 834002, BIHAR, INDIA.

Inventor: DR. BIMALENDRA NATH MAJUMDER.

Application No. 1597 Cal 75 filed August 14, 1975.

Complete Specification left on November 15, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 10 Claims

An improved charging and distributing device for blast or shaft furnaces or for shaft reactors, comprising a vertically movable single ball, one or more gas seal(s), one or more charging valve(s) disposed above said bell, a bell red to which is fitted said single bell, a rotating deflector disposed below said bell, and means for carrying out charging and distributing operations, characterised in that said deflector is adapted to receive the charge or raw materials falling from said bell, during operation of the device, through a hopper, and said deflector is either fitted to said bell-red and is adapted to be rotated through said rod, or is disposed independently of said rod and the bell, and is adapted to be rotated by means of a separate drive source.

Compl. Specn. 20 pages.

Drg. 2 sheets.

CLASS: 10B & 10D

145666

Int. Cl.: C 06 c 5 04.

IMPROVEMENTS IN DETONATORS.

Applicant: S. A. D'EXPLOSIFS ET DE PRODUITS CHIMIQUES A FRENCH COMPANY, OF 61, RUE GALILEE, 75008, PARIS. FRANCE.

Inventor: BFRTRAND CHATEL DE BRANCION.

Applicat on No. 720 Cal 76 filed April 26, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 14 Claims

A detonator for explosives having improved safety characteristics and minimised risk of premature detonation, which comprises a thin-walled outer tubular member open at either end, a thick-walled inner tubular member of smaller diameter than the thin walled member adapted to be housed axially within the outer tubular member, a predetermined minimum quantity of explosive composition contained within said thick-walled tube and a fuse or ignition member in contact with the explosive composition housed in the thick-walled member with the opposite end of said fuse or ignition member extending, if necessary, into one open end of the outer thin-walled member.

Compl. Specn. 14 pages.

Drg. 1 sheet.

CLASS: 56 G

145669

Int. Cl.: B 01 d 3 26.

FRACTIONATION HEAT BALANCE CONTROL SYSTEM.

Applicant: UOP INC., A CORPORATION ORGANISED IN THE STATE OF DELAWARE, WITH ITS PRINCIPAL PLACE OF BUSINESS AT TEN UOP PLAZA-ALGON-QUIN AND MT. PROSPECT ROADS, DES PLAINES, ILLINOIS, U.S.A.

Inventor: DAVID MILTON BOYD.

Application No. 2247 Cal 76 filed December 22, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents-Rules, 1972) Patent Office, Calcutta.

### 5 Claims

A control system for a fractionation column wherein (i) a mixed-component feed stream is introduced through a locus intermediate the top and bottom thereof; (ii) liquid bottoms material is recovered from the lower end of said column and at least a portion thereof is partially vaporized and returned to the reboiler section of said column; and, (ii) overhead material is recovered from the upper end of said column, condensed and at least a portion thereof returned to the rectification section of said column as a reflux stream, which control system comprises, in cooperative combination:

- (a) a first pair of vertically-spaced temperature sensors below said feed locus and proximate thereto, a first differential temperature measuring device connected to said first pair of temperature sensors and, first control means co-acting with said first delta-T measuring device and regulating the degree to which the portion of said frame, bottoms material is vaporized;
- (b) a second pair of vertically-spaced temperature sensors below said feed locus, one of which is proximate thereto and the second of which is proximate to the locus through which said partially vaporized liquid bottoms material is returned to said reboiler section and, a second differentialtemperature measuring device connected to said second pair of temperature sensors;
- (c) a third pair of vertically-spaced temperature sensors above said feed locus, one of which is proximate thereto and the second of which is proximate to the locus through which said reflux stream is returned and, a third differential temperature measuring device connected as said that their or temperature sensors; and,
- (d) a differential-temperature computing device connected to both of said second and third delta-T measuring devices, and co-acting with second control means for regulating the quantity of said overhead vaporous material returned to said column as said reflux stream.

Compl. Specn. 34 pages.

Drg. 1 sheet.

CLASS: 32 F2(b) & 60x 2 d

145671

Int. Cl.: C 07 d 29 00.

PREPARATION OF A NEW VINCAMINE SALT.

Applicant: SOCILTE D'ETUDES DE PRODUITS CHI-MIQUES, OF 4, RUE THEODULE RIBOT 75017 PARIS, FRANCE, A FRENCH COMPANY.

Inventor: ANDRE ESANU.

Application No. 628 Cal 77 filed April 27, 1977.

Convention date 11th May, 1976 (19290|76) United Kingdom.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Calcutta.

#### 2. Claims

A process of preparation of the new vincamine 5-pyridoxal phosphate of the formula I shown in the accompanying drawings

consisting in reacting in stoichiometric proportions at about 65°C a suspension of vincamine in a water and ethanol mixture on 5-pyridoxal phosphate.

Compl. specn. 5 pages

Drg. 1 sheet.

CLASS: 82

145677

Int. Cl.: A 01 K 83 00.

A FISHING HOOK AND SNOOD HEAD IN COMBINATION THEREWITH.

Applicant & Inventor: KOLBJORN BJORSHOL, A NORWEGIAN SUBJECT, OF 6560 LANGOYNESET. NORWAY,

Application No. 851 C. 176 filed May 15, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# Claims

A fishing hook comprising an elongated neck portion, a tapered portion and a thickened neck portion, including means forming a projection on an end of 'said elongated neck portion opposite the tapered portion, said projection having a face which extends at a right angle to the elongated direction of the elongated neck portion and is adapted to receive a mechanical impact acting longitudinally of the elongated neck portion.

Compl. Specn. 6 pages.

Drg. 1 sheet.

CLASS: 32 B

145697

Int. Cl.: C 07 b 27 00.

AN IMPROVED PROCESS FOR THE CATALYTIC ALKYLATION OF ISOBUTANE.

Applicant: THE STANDARD OIL COMPANY, AN OHIO CORPORATION, OF MIDLAND BUILDING, CLEVELAND, OHIO 44115, UNITED STATES OF AMERICA.

Inventor: RICHARD HOWARD JONES.

Application No. 55 Cal<sub>1</sub>77 filed January 15, 1977.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 41 Claims

A process for catalytic alkylation of isobutane with an olefin comprising the steps of :

- (a) contacting said olefin with a molar excess of isobutane and inert alkanes such as herein described in the presence of an acid catalyst such as herein described in a reactor to form a reactor effluent containing alkylate, isobutane, acid catalyst and inert alkanes:
- (b) separating said acid catalyst from said reactor effluent to form a separator effluent by a method such as herein described;
- (c) effecting a liquid vapor separation on said separator effluent 10' obtain a liquid bottoms stream containing isobutane and alkylate and an overhead vapor stream containing isobutane and inert alkanes;
- (d) distilling said liquid bottoms stream to separate alkylate product as a liquid bottoms product and isobutane as a vaporous distillation effluent;
- (e) passing a portion of said separator effluent prior to the liquid vapor separation step, as a cooling effluent in indirect heat exchange with said vaporous distillation effluent to condense isobutane therein and to vaporize a portion of said cooling effluent; and thereafter;
- (f) effecting the liquid vapor separation step on said cooling effluent.

Compl. specn. 26 pages.

Drg. 3 sheets.

CLASS: 35 G & 178

145705

Int. Cl. C 04 b 41|04 41|06 B 24 b 1|00.

STONE SURFACE TREATMENT.

Applicant & Inventor : HIROSHI ISHIZUKA, CITIZEN OF JAPAN, OF 19-2 EBARA 6-CHOME, SHINAGAWA, TOKYO, JAPAN, FNGINEER.

Application No. 1340[Cal]76 filed July 27, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Frient Office, Calcutta.

# 10 Claims

A method for manufacturing stone slabs with an increased durability, which comprises the steps of subjecting a stone slab with crystal grains and consequently gaps therebetween communicating to the surface of the stone slab to an intimate contact with a liquid filing agent to cause a permeation thereof in said gaps and drying the resulting stone slab to solidify said filing agent in said gaps.

Compl. Specn. 14 pages.

Drg. Nil.

CLASS: 56 G

145707

Int. Cl.: B 01 d 3 26.

SYSTEMATIZED METHOD AND CONTROL OF FRACTIONATION HEAT BALANCE.

Applicant: UOP INC. A CORPORATION ORGANIZED IN THE STATE OF DFLAWARE, OF TEN UOP PLAZA—ALGONQUIN AND MT. PROSPECT ROADS, DES PLAINES, ILLINOIS, U.S.A.

Inventors · DAVID MILTON BOYD.

Application No. 2246 Cal 76 filed December 22, 1976.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 8 Claims

A control system for a fractionation column containing a plurality of spaced-apart trays or decks, and wherein (i) a feed stream is introduced through a locus intermediate the top and bottom thereof; (ii) liquid bottoms material is recovered from the lower end of said column, and at least a portion thereof partially vaporized and returned to the reboiler section; and (iii) overhead material is recovered from the upper cuid of said column, condensed and at least a portion thereof returned to the rectification section as a reflux stream, which control system comprises, in cooperative combination:

(a) a first pair of veril. "I shared temperature sensors below said feed locus and separated by a plurality

of trays, and a first differential-temperature measuring device communicating with said first pair of temperature sensors;

- (b) a second pair of vertically-spaced temperature sensors below said feed locus and separated by a greater plurality of trays than said first pair, and a second differential compensate measuring device communication with said second pair of temperature sensors;
- (c) first differential-temperature computing means communicating with a selected one of said first and second delta-T measuring devices;
- (d) second differential temperature computing means communicating with said first computing means and the non-selected delta-T measuring device, and co-acting with first control means for regulating the degree of vaporization of said liquid bottoms material returned to said reboiler section;
- (e) a third pair of vertically-spaced temperature sensors above said feed locus; and,
- (f) a third differential-temperature measuring device communicating with said third pair of temperature sensors and co-acting with second control means for regulating the quantity of reflux returned to said rectification section.

Compl. Specn. 31 pages.

Drg. 1 sheet.

CLASS: 107 G

145709

Int. Cl.: F 02 b 77 12.

INTERNAL COMBUSTION ENGINE.

Applicant: TOWNSEND ENGINEERING COMPANY, OF 2425 HUBBELL AVENUE, DES MOINES, IOWA, UNITED STATES OF AMERICA, A U.S. COMPANY.

Inventor: RAY THEODORE TOWNSEND.

Application No. 1312 Cal 75 filed July 5, 1975.

Appropriate office for apposition proceedings (Rule 4, Patents Rules, 1972) Fatent Office, Calcutta.

# 5 Claims

An internal combustion engine, comprising, an engine frame means having a rotatable shaft extending outwardly therefrom, a plurality of cylinders adapted to receive combustible fuel. a piston movably mounted in each of said cylinders and being movable between compression and expansion positions with respect thereto, said piston forming a combustion chamber in conjunction with said cylinders, air supply means for supplying a source of relatively cool ambient air directly through the interior of said cylinders after combustion of fuel in said cylinders has taken place to cool the pistons and the interior of said cylinders, characterised in that at least a portion of the interior surface of said combustion chamber is comprised of a heat insulating material to retard the transfer of heat into and through the walls of said cylinders whereby the conduction of heat outwardly through said cylinders will be diminished and said cylinders will be cooled substantially only by the introduction of said relatively cool ambient air therein.

Comp. specn. 18 pages.

Drg. 2 sheets.

CLASS: 39 P

145713

Int. Cl.: C 04 b 11|14.

A METHOD TO PRODUCING AN IMPROVED ROCK MASS, A PLASTER COMPOSITION FOR USE IN THE ROCK MASS AND A METHOD OF PRODUCING SUCH COMPOSITION.

Applicant · IMPERIAL CHEMICAL INDUSTRIES LIMITED, A BRITISH COMPANY, OF IMPERIAL CHEMICAL HOUSE, MILLBANK LONDON, SWIP 40G, ENGLAND, MANUFACTURERS.

Inventor: HENRY KINNY KENNEDY-SKIPTON.

Application No. 1918 | Cal | 76 filed October 20, 1976.

Conventional date 5th November 1975 (45925|75) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 19 Claims

A method for producing an improved rock mass, which method comprises forming a drdlhole in the rock mass and grouting in said drillhole a fixing element as described herein by means of a plaster composition based on -gupsum gauged with an aqueous solution containing 0.01 to 3%~w|v> of water-soluble salt of carboxy methyl cellulose (CMC).

Compl. Specn. 23 pages.

Drg. Nil.

CLASS: 32 F 2 b

145714

Int. Cl.: C 07 d 51 42.

A PROCESS FOR OBTAINING ISOPROPYLAMINO PYRIMIDINS ORTHOPHOSPHATE.

Applicant: SOCIETE D'ETUDES DE PRODUITS CHIMIQUES, A FRINCH COMPANY, OF 4, RUE THEODILE RIBOT 75017 PARIS, FRANCE.

Inventor: ESANU ANDRE.

Application No. 137 Cal 77 filed January 31, 1977.

Convention date 18th February, 1976 (06430]76) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 197?) Patent Office, Calcutta.

#### 2 Claims

A process of obtaining the orthophosphate of 2-isopropyl amino pyrimidine of the formula shown in the accompanying drawings,

consisting in reacting, in an appropriate polar solvent such as herein described, 2-isopropyl amino pyrimidine on a slight excess of about 10% of orthophosphoric acid.

Compl. Specn. 8 pages.

Drg. 1 sheet.

CLASS: 40 B, 32 B & 56 B

145719

Int. Cl.: B 017 11[00; C 07 c 3]10; C 10 g 13[02, 23]02, 35[04.

# HYDROCARBON CONVERSION PROCESS.

Applicant: UOP INC., A CORPORATION ORGANISED IN THE STATE OF DI LAWARE, WITH ITS PRINCIPAL PLACE OF BUSINESS AT TEN UOP PLAZA-ALGON-QUIN AND MT. PROSPECT ROADS, DES PLAINES, ILLINOIS. UNITED STATES OF AMERICA.

Inventors: 1. ERNI'S1 LEO POLLITZER. 2. JOHN CHANDLER HAYES.

Application No. 2011 Cal 75 filed October 16, 1975.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Fatent Office, Calcutta.

# 22 Claims

A process for converting a hydrocarbon such as herein described which comprises contacting the hydrocarbon at hydrocarbon conversion conditions such as herein described with an acidic catalytic composite comprising a porous carrier material containing, on an elemental basis, 0.01 to 2 wt. % platinum group metal, 0.5 to 5 wt. % cobalt, 0.01 to 5 wt. % tin and 0.1 to 3.5 wt. % halogen, wherein the platinum group metal, cobalt and tin are uniformly dispersed throughout the porous carrier material, wherein substantially all of the platinum group metal is present in the elemental metallic state, wherein substartially all of the tin is present in a particle or crystalite size having a maximum dimension less than 100 Angstroms and wherein substantially all of the cobalt is present in the elemental metallic state or in a state which is reducible to the elemental metallic state under said hydrocarbon conversion conditions and in a

particle or crystallite size having a maximum dimension less than 100 Angstroms.

Compl. specn. 44 pages.

Drg. Nil.

CLASS: 40 B; 32 B; 56 B

145720

Int. Cl.: B01j. 11|00; C07c 3|10; C 10 g, 13|02.

23|02, 35|04.

HYDROCARBON CONVERSION PROCESS.

Applicant: UOP INC., A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARL, UNITED STATES OF AMERICA OF TEN UOP PLAZA, ALGONGUIN & MT. PROSPECT ROADS, DES PLAINES, ILLINOIS, UNITED STATES OF AMERICA.

Inventor: POLLITZES ERNEST LEO, HAYES JOHN CHANDER.

Appropriate office for opposition proceedings (Rule 4, Patems Rules, 1972) Patent Office.

#### 22 Claims

A process for converting a hydrocarbon such as herein described which comprises contacting the hydrocarbon at hydrocarbon conversion conditions such as herein described with an acidic multi-metallic catalytic composite comprising a porous carrier material containing, on an elemental basis, 0.01 to 2 wt. platinum group metal, 0.5 to 5 wt. cobalt, 0.01 to 5 wt. germanium and 0.1 to 3.5 wt. halogen such as herein described wherein the platinum group metal, cobalt, and germanium are uniformly dispersed through out the porous carrier material, wherein substantially all of the platinum group metal is present in the elemental metallic state, wherein substantially all of the germanium is present in an oxidation state above that of the elemental metal, and wherein substantially all of the cobalt component is present in the elemental metallic state under same hydrocarbon conversion conditions.

Compl. Specn. 46 pages.

Drg. Nil.

CLASS: 128-G.

155101.

Int. Cl.: A61 b 19100.

A BLANK FOR A REMOVABLE CERVICAL CAP.

Applicant & Inventors: ROBERT AUGUST GOEPP, UWE ERNST FREESE AND MARVIN PHILLIP LOEB, OF 5928 NORTH KILBOURN, CHICAGO, ILLINOIS 60646, UNITED STATES OF AMERICA; 238 NORTH FOREST, OAK PARK. ILLINOIS 60302, U.S.A.; 7350 NORTH WASHTENAW AVENUE, CHICAGO, ILLINOIS 60645, UNITED STATES OF AMERICA.

Application No. 1443 | Cal | 80 filed December 30, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 7 Claims

A blank for a removable cervical cap which comprises:

a substantially planar sheet of a thermoplastic elastomeric material and having a central aperture; and

an elastomeric web superposed over said aperture; said elastomeric web having a thickness less than the thickness of said sheet and being secured to said sheet about said aperture but providing a one-way passageway from said aperture between the web and said sheet.

Compl. specn. 33 pages.

Drgs. 4 sheets.

CLASS: 61-A.

155102.

Int. Cl.: A 23 b 9|00; A 23 1 3|00.

A SYSTEM FOR DRYING OR WETTING OF A STORED PRODUCT.

Applicant: UNISEARCH LIMITED, OF 221-227 ANZAC PARADE. KENSINGTON, NEW SOUTH WALES, COMMONWEALTH OF AUSTRALIA.

inventors: 1. RONALD GRAHAM BOWERY, 2. AND-REW KENNEDY FULLFORD 3. MICHAEL 50011 KEARNEY.

Application No. 385 Cal 81 filed April 8, 1981.

Convention dated 8th April, 1980 (PE 3052/80) Additional.

Appropriate office for opposition proceedings (Kule 4, Patems Kules, 19/2) Patems office, Calcutta.

#### 5 Claims

A system for drying or wetting of a stored product in a storage means, comprising moisture, temperature and relative humidity measuring means adapted to be located in the stored product, temperature and relative humidity measuring means adapted to be located in amoient air external to the storage means, means for calculating the humidity of an within the storage means and the numidity of the ambient air, means for calculating the relative humidity that the ambient air would have if its temperature was changed to that of the stored product, means for determining the equilibrium relative humidity in the stored product and means controlling the operation of ambient air force feeding means to feed ambient air across and/or through the stored product when so doing would cause drying or rewetting of the stored product as required in accordance with maintenance of a predetermined moisture content for said product.

Compl. specn. 8 pages.

Drgs. 1 sheet.

CLASS: 13-A; 155-F<sub>1</sub>.

155103.

Int. Cl.: B 65 d 65 00, 65 40.

A MULTI-LAYER POLYMERIC LAMINATE WITH DRYING AGENT THEREIN.

Applicant: AMERICAN CAN COMPANY, OF AMERICAN LANE, GREENWICH, CONNECTICUT 06830, U.S.A.

Inventors: 1. CHRI\$TOPHER JOHN FARRELL, 2. BOH CHANG TSAI, 3. JAMES ALAN WACHTEL.

Application No. 387 Cal 81 filed April 8, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutt.

# 31 Claims

A multi-layer polymeric laminate of which one layer is of a moisture sensitive polymer selected from the group consisting of ethylene-vinyl alcohol and polyvinyl alcohol and has a drying agent as herein defined incorporated in the laminate for protecting the said moisture sensitive polymer.

Compl. specn. 19 pages.

Drgs. 2 sheets.

CLASS: 190-D.

155104.

Int. Cl.: F 03 d 3 00.

IMPROVEMENTS IN AND RELATING TO WIND-MILLS.

Applicant & Inventor: FERENC KOCSIS, OF LOT 15 CHAPMAN VALLEY ROAD, WAGGRAKINE, WESTERN AUSTRALIA, 6530, COMMONWEALTH OF AUSTRALIA.

Application No. 494 Cal 81 filed May 11, 1981.

Convention dated 9th May, 1980 (PE 3489) Australia.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 5 Calims

A windmill comprising a mounting member adapted to allow rotation about it on a vertical axis and adapted to be supported on a tower, a rotatable frame encircling the said mounting member carried on bearings on the said mounting member, a series of flanges mounted on the said rotatable frame and spaced apart horizontally, a plurality of vertically spaced rows of outwardly properties and planes to extend outwardly therefrom and shaped as wind scoops hollowed on a front

side and having at least one aperture through the wall of each said blade, a flap within each said blade attached by one edge to the said blade to extend over the said aperture arranged to close the said aperture when wind pressure is directed to the hollow of the said blade but to open the said aperture when the said ecoop is moved into the wind, the said blades being generally trough-shaped and tapering to a larger width outwardly and terminate in a substantially part-hemispherical form, the said apertures being positionally toward the outer ends of the said blades and extending to the said part-hemispherical part of the said blades, the said blades of an upper row being upwardly sloped from that said flange, and the said blades of a lower row being downwardly sloped from that said flange.

Compl. specn. 11 pages

Drgs. 2 sheets.

CLASS: 72-B.

155105.

Int. Cl.: C 06 b 1 00.

AN IMPROVED WATER-IN-OIL EMULSION EXPLOSIVE COMPOSITION AND A METHOD OF PREPARING THE SAME.

Applicant: INDIAN EXPLOSIVES LIMITED. OF ICI HOUSE, 34, CHOWRINGHEE ROAD, CALCUTTA-700 071, WEST BENGAL INDIA.

Inventors: 1 DHIRENDRA NATH BHATTACHARYYA.
2. JOHN STEWART CAMPBELL, 3. SRINIVASACHARI SESHAN, 4. SOUMENDRA NATH SEN.

Application No. 676 Cal 81 filed June 22, 1981.

Complete Specification left 12th August, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 6 Claims

An improved water-in-oil emulsion explosives composition having improved storage stability which comprises (i) 5 to 30% of water, (ii) 3 to 15% of a carbonaceous fuel, (iii) 20 to 80% of known inorganic oxidiser salts such as ammonium nitrate, calcium nitrate, sodium nitrate or potassium nitrate, either singly or in combination of two or more of them, (iv) 0.2 to 0.5% of a known gassing agent such as sodium nitrite or a nitros compound including N, N-dinitroso pentamethylene tetramine, (v) 0.00 to 2% of an organic nitrogenous compound as a novel stabilizer selected from the group viz.. unsubstituted substituted aryl diazo compounds, unsubstituted substituted aryl amines and their salts, unsubstituted substituted aryl amines and their salts, unsubstituted substituted aryl being used either singly or in combination, (vi) 0.5 to 4% of one or more of known emulsifiers such as herein described and optionally. (vii) known flame quenching coolants and or metallic particulate fuels.

Compl. specn. 17 pages Drg. 1 sheet.

Provisional Specification 9 pages.

CLASS: 32-F1.

155106.

Int. Cl.: C 07 d 33|36, 33|48.

THE PROCESS FOR THE PREPARATION OF QUINO-JINE CARBOXYLIC ACID DERIVATIVES.

Applicant: KYORIN SEIVAKU KABIISHIKI KAISHA OF 2-5 KANDA SURUGADAL, CHIYODA-KU. TOKYO, IAPAN,

Inventors · 1 TSUTOMII IRIKURA, 2. TOSHIF SHIBA 3 HIROSHI MATSUKUBO

Application No 855|Cal|81 filed July 30, 1981

Appropriate office for opposition proceedings (Rule 4 Patenti Rules 1972) Patent Office, Calcuita

# 1 Claim

A process for the preparation of 1-substituted-6-fluoro-7-(1-piperazinyl) or 4-substituted-1-plperazinyl)-4-oxo, 4-di-

hydroquinoline -3- carboxylic acid having the structural formula [IV] shown in the accompanying drawings

wherein R<sub>1</sub> and R<sub>2</sub> are defined as hereinafter, which comprises hydrolyzing by the method such as, for example, herein described the compound having the structural formula [III] shown in the drawings

wherein R<sub>4</sub> is a group of the formula shown in Fig. 1 of the drawings

and  $R_1$ ,  $R_2$  and  $R_3$  are defined as hereinafter which is obtained by the reaction of 1-substituted-6-fluoro-7-chloro-4-oxo-1, 4-dihydroquinoline-3-carboxylic acid ester derivative having the structural formula [I] shown in the drawings

wherein  $R_1$  is ethyl or vinyl group,  $R_2$  is a lower alkyl group having  $C_1$ - $C_3$  atoms with a piperazine derivative having the structural formula [II] shown in the drawings,

wherein  $R_3$  is hydrogenatom or lower alkyl group having  $C_1\text{-}C_5$  atoms.

Compl. specn, 17 pages. Drg. Nil.

CLASS:  $32-F_3$  (a) & (b);  $55-E_4$ ;  $60-X_2$  d.

155<del>017:</del>

Int. Cl.: C07 c 51 00, 67 00.

PROCESS FOR PREPARATION OF ALPHA-AROMATIC GROUP SUBSTITUTED ALKANOIC ACIDS OR ESTERS

Applicant: SAGAMI CHEMICAL RESEARCH CENTRE, OF 4-5, 1-CHOME, MARUNOUCHI, CHIYODA-KU, TO-KYO, JAPAN.

Inventors: 1. GENICHI TSUCHIHASHI, 2. SHUICHI MITAMURA, 3. KOUJI KITAJIMA.

Application No. 1023 Cal 81 filed September 10, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# D Chins

A process tor preparing an alpha-aromatic groups substituted alkanoic acid or it lefter or the emeral formula

$$\begin{array}{c}
R^{4} \\
1 \\
Ar-CH_{1}CCCR
\end{array} \tag{1}$$

wherein Ar represents at a constitution and  $R^1$  represents a hydrogen atom or a saturated alignmic group, or Ar and  $R^1$  may form a condensed true tegether with the carbon atom to which they are bond d; and R represents a hydrogen atom, an alkyl group,  $\alpha_1$  a hydroxyddyl group.

characterized in that an alpha sulfonyloxyketone acetal of the general formula

$$\begin{array}{ccc}
& OR^{*} & OSO - R^{5} \\
& AR - C & CH & - R^{T} (H) \\
& OR^{*} & & & & & & & & \\
\end{array}$$

wherein R<sup>3</sup> and R<sup>4</sup>, independently from each other, represent an alkyl group, o taken together, represent an alkylene group; R<sup>3</sup> represents a substituted or unsubstituted, alkyl group or an aromatic group; and Ar and R<sup>4</sup> are as defined above, is hydrolyzed.

Compl speen 40 pages. Digs I sheet

CLASS : 55-L 2

155108.

Int CI. A61 k 5 00.

# A MOUTHWASH COMPOSITION

Applicant · UNILEVFR PLC, OF UNILEVFR HOUSE, BLACKFRIARS, LONDON FC4P 4BQ, GREAT BRITAIN.

Inventors : 1. PROF. DR HANS R. MUHLEMANN, 2. DR ULRICH P SAXES

Application No. 1079 C 181 filed September, 25, 1981.

Convention dated 10th October 1980 (8032743) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta

# 7 Claims

A process for preparing a mouthwash composition comprising solubilizing and emulgatine water-insoluble pyrimidine base and admixing therein hexetidine or its derivatives and one or several zinc saits optionally also non-zinc flourides in an queous medium for synergistic inhibition of the formation of dental plaque

Compl. specn 22 pages. Drgs 1 sheet

**CLASS**: 186-A

155109.

Int. Cl.: H04 b 1 00

# A DIGITAL RECURSIVE AUTOMATIC EQUALIZER.

Applicant: INTERNATIONAL TELEPHONE AND TELE-GRAPH CORPORATION, OF 320 PARK AVENUE, NEW YORK 10022, STATE OF NEW YORK, UNITED STATES OF AMERICA

Inventor: 1 ROBERT TREIBER

Application No. 1177 Call 81 fled Ontober 22, 1981

Convention data 22nd Ser amber 1981 (28571 81) UK.

Appropriat office to exposition proceedings (Rule 4. Patents Rules, 1972) Patent Office, Calcutta.

# 6 Claims

A digital recursive automa is equalized for minimizing the variance between a digital input signal and a reference to provide signal equalization for a communication transmission on a full duplex transmission by a comprising means for computing an output representative of the partial derivatives of the

means square error signal with respect to a series of recursive filter coefficients, it cans responsive to said computed output for adaptively changing said coefficients in accordance with the value of the error between said digital input signal and said reference to cause said series of recursive filter coefficients to rapidly converge into a series of updated filter coefficients, memory means for storing recursive filter coefficients and intermediate value representative of cofficient update to another, means for transferring said updated filter coefficients into said memory means, control means for accessing said memory means to enable said updated filter coefficients to be selectively transferred from said equalizer directly to the coefficient inputs of one or more recursive digital filters, multiplexing means for time sharing said equalizer over a plurality of transmission lines, including means for selectively time multiplexing a plurality of digital input signals from N transmission lines to said means for computing in time multiplexed sequence, means for selectively computing N series of said updated filter coefficients, one of N being associated with each of said transmission lines, means for distributing said N series of said updated filter coefficients to said memory means, and means associated with said distributing means for selectively transferring said N series of updated filter coefficients to N recursive digital filters, each associated with one of said N transmission lines.

Compl. spccn. 36 pages Drgs 12 sheets.

CLASS: 186-A

155110.

nt C1 · H04 b 1 00.

DIGITAL TFI FPHONF LINF CIRCUIT PROVIDING AN ANALOG DIGITAL INTERFACE.

Applicant · INTERNATIONAL TFLEPHONE AND TELE-GRAPH CORPORATION, OF 320 PARK AVENUE, NEW YORK 10022, STATE OF NEW YORK, UNITED STATES OF AMERICA.

Inventor : 1 TREIBER ROBERT.

Application No. 1178 Cal'81 filed October 22, 1981.

Convention date 22nd September, 1981 (28572]81) U.K.

Appropriate office for opposition proceedings (Rule 4. Patents Rules 1972) Patent Office, Calcutta.

# 19 Claims

A digital telephone line circuit providing an intergace between a full duplex analog telephone subscriber line and a digital switching system, comprising:

means for automatically digitally synthesizing an output matching transmission lineterminating impedance;

two-to-four wire conversion means for digitally separating full duplex transmit and receive information signals on said subscriber line into a pair of digital signals, each separate from the other;

automatic recursive equalizer means coupled to said two-to-four wire conversion means for providing time multiplexed signal optimizationleaualization of said information signals by time multiplexing said recursive equalizer means to said full duplex line such that automatic equalization is provided for said line in accordance with its individual transmission line characteristics during the internal that said equalizer means is combled to said two-to-four wire conversion means and to said means for digitally synthesizing an output matching transmission line fermination impedence

Compl specn 40 pages. Drgs. 12 sheets.

CLASS: 97-B

155111.

In CI: H05 b 11|00

AN FLECTRODE HOLDER ASSEMBLY FOR HOLDING AN ELECTRODE IN AN FLECTROTHERMAL SMELTING FURNACE.

A'nnlicant: FLKEM als, OF MIDDFLTHUNSGATE 27, OSLO 3, NORWAY.

Inventor : 1 KNUT EVENSEN

Application 1'o 1186 Call 81 filed October 24, 1981.

Appropriate office for opposition proceedings (Rule 4. Palente Rules, 1972) Patent Office, Calcutta.

#### 14 Claims

An electrode holder assembly for holding an electrode in an electrothermal smelting furnace. casing having ribs projecting radially comprising:

- (a) a plurality of clamping means, said clamping means being operative to contact said ribs for conducting current into the electrode; and
- (b) each said clamping means having opposed co-operating clamping surfaces adapted for clamping only against the opposite radial faces of a ribe of said electrode casing so as to grin the rib between them, whereby the clamping means impose only tangential forces on the casing of the electrode.

Compl. specn. 23 pages. Drgs. 6 sheets.

CLASS: 85-B.

155112.

Int. Cl.: F27 d 1 00.

BRICKWORK CONSTRUCTION.

Applicant: OUTOKUMPU OY, OF SF-83500 OUTOKUM-PU. FINLAND.

Inventors: 1. FRANS HEIKKI TUOVINEN, 2. PENTTI OLAVI HOKKANEN, 3. AIMO AULIS NURMINEN, 4. LAURI ANTERO MUSTIKKA, 5. MATTI ASSERI VIRTA.

Application No. 1194 Cal 81 filed October 26, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta,

#### 3 Claims

A brickwork construction for making a combustion gas distribution chamber for a shaft kilo 1.1 consider bricks that are preferably keyed and locked to 1.1 or provide the having on the side facing the shaft combustion gas blow-apertures. Characterised in that wedge-shaped bricks (3-6) surround the combustion chamber (2), the bricks being laid so that their narrow ends are toward the shaft kiln (1), the bricks forming an arched construction.

Compl. specn, 7 pages. Drgs, 3 sheets,

CLASS: 127-B. 155113.

Int. Cl.: F16 d 1|02, 31|00, 33|00, 39|00.

A COUPLING FOR THE FRICTIONALLY RESISTANT ROTARY CONNECTION OF MACHINE COMPONENTS.

Applicant & Inventor: FRANCOIS DURAND, OF 11 RUE DU BATEAU, 06600 ANTIBES, FRANCE.

Application-No. 1393 Cal 81 filed December 7, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 15 Claims

A coupling for the frictionally resistant rotary connection of machine components, for example a hub and a shaft, having at least one thrust collar with an external conical surface and engaging coaxially with the associated machine component, whose external conical surface is substantially overlapped by an internal conical surface of an external ring, which comprises with an internal cylinder jacket surface of an annular shoulder an annular piston and an annular pressure chamber which may be acted upon by hydraulic fluid supplied via a supply line, and which may be axially supported in a hydraulic manner on the annular piston and may be axially displaced towards the rising external conical surface of the thrust collar, characterised in that the thrust collar (13a, 13b, 13c) has rigidly axially connected to it an additional thrust collar (14a, 14b, 14c) which is coaxial with the first thrust collar (14a, 14b, 14c) which is coaxial with the first thrust collar (14a, 14b, 14c) which is coaxial with the first thrust collar (14a, 14b, 14c) which is coaxial with the first thrust collar (14a, 14b, 14c) which is coaxial with the first thrust collar (14a, 14b, 14c) which is coaxial with the first thrust collar (14a, 14b, 14c) which is coaxial with the first thrust collar (14a, 14b, 14c) which is substantially adjacent with its internal conical surface (14a) an axially displaceable manner, in that the supply line (30) for the hydraulic fluid communicates directly with the pressure chamber (27), in that the angle of inclination (α) of each 3-397GI/84

conical surface is slightly greater than the angle of between the conical surfaces (A, J) lying adjacent to one another in each case and in that the axially offset position of the external rings (16, 17) is ensured by an axially adjustable projection (24, 41, 42, 43), in particular connection screws retained by an external ring (17).

Compl. specn, 16 pages. Drgs., 4 sheets.

CLASS: 33-E.

155114.

Int. Cl.: B22 d 17|12, 21|04, 27|12; F16 j 9|22.

WEAR RESISTANT INSERT FOR CAST LIGHTWEL-GHTED PISTONG AND METHOD OF CASTING.

Applicant: IMPERIAL CLEVITE INC., OF. 2550 GOLF ROAD. SUITE 200, ROLLING MEADOWS, ILLINOIS 60008, U.S.A.

Inventor: 1. DAVID JAMES SNEE.

Application No. 1397 Call 81 fled December 8, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 11 Claims

A wear resistant insert for use in casting pistons of light-weight, comprising an annular ring of a wear resistant material, having a generally evilindrical perioheral edge which conforms generally with the surface of the piston characterized in that the annular ring has at least one projection extending outward from the peripheral edge.

Compl. specn. 15 pages. Drgs. 2 sheets.

CLASS: 33-E.

155115.

Int. Cl.: B22 d 21'04, 27'12, 17'12, 17'24; F16 j 9'22.

METHOD & APPARATUS FOR SQUEEZE CASTING PISTONS WITH WEAR RESISTANT INSERTS.

Applicant: IMPERIAL CLEVITE INC., OF 2550 GOLF ROAD, SUITE 200, ROLLING MEADOWS, ILLINOIS 60008, U.S.A.

Inventors: 1. DAVID J. SNEE, 2. JOHN T. MILLER.

Application No. 1398 Call 81 filed December 8, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 20 Claims

A method of casting  $e^{-1}$ ightweight pioton with a wear resistant insert comprising:

disposing an annular ring or wear resistant material in a die cavity, which die cavity conforms to the exterior shape of the piston;

pouring a predetermined amount of a molten lightweight alloy into the die cavity;

closing the mold cavity with a punch;

applying a force with the punch which presses the lightweight alloy firmly and continuously against the insert and the die cavity as the molten alloy sol differ, characterized in this the said wear resistant insert is prehented prior to being disposed in said die cavity.

Compl. specn. 15 pages. Drgs. 2 shee

CLASS: 119 D; 119-F-, 3

155116.

Int. Cl. D03 d 47 00.

SHUTTLELESS WEAVING MACHINE.

Applicant: RUTI-TE STRAKE B. V., DEURNE, THE NETHERLANDS.

Inventor: 1. PAUL GUNNEMAN.

Application No. 13 Cal 82 filed January 4, 1982.

Appropriate office for opposition proceedings (Rule 4, Potents Rules, 1972) Patent Office, Calcutta.

### 10 Claims

A shart I as we wing machine having a nizzle for receiving a wert thread from a stationary supply and inserting such well the clinito a worp in die well a head guid channel a reed carried by a batting of billing in him in ed weft thread and a ricead folde disposed only on the yarr supply and thread said in ching being his clinical nitread in that said thread helder is disposed in sild nozzle.

Compleren 12 pecs b s 2 hets

CLASS 51 A

155117

Int Cl 23 b 1 04 F01 1 1 16

SPRAY H AD AS MILL OR SPRAY DRYER FOR INJECTING, A SID, S. ANTO "PA" DRYING CHAMPER

Appl in COMPUSTION ENGINEERING INC. OF 1900 PROSECTE HILL ROAD WINDSOR CONNECTED TO A LEGISLATION OF AMERICA.

Inventors 1 18 1 1 1 ROL JO, 2 NF L BFR ARD HUMPHRI, S

Application No. 224 C 182 G d 1 brury 26, 1982

Approximat office to opposition proceeding (Ru! 4 Patents Pules, 1972) Patent Offic Calcutta

#### 5 Claims

In a spray dry r apparatus having a housing defining a spray dry ag charaber wherein sharp is died by contact with a hot divine gat and a drying an upply dust having an ouder in flow communication with said arrange chamber through a gas inlet open not in the roof of hid housing a spray head a sembly omping

- (1) an innul swil vine a sembly diposed about the gistal circh ool of ild spray dryer nousing in 1 rm drife the outlet of the living gis supply duct not the food of 1 only dryer housing the living gist supply duct not the drift of the given which the drift gas pass from the utlet of the drying gas supply duct it is high discharged chamber said swifter vine is ribbly hiving a plurality of swifter vanes disposed with it annular passageway there into an outline and in a lot tonal motion to the drying gas priging the reflectionship.
- (b) ar atomizing spilly had housing disposed coaxially within the central of old inputar or infer vane assembly said atomizing particular housing having a floor will a central or in not the ein and a central inward by flat dolling a control of the upper end
- (c) in to and guide use having a control outwardlyfined finnometric lower and adapted to mate with
  the originative distinct finnee of said atomizing
  sprit head him and extending upwardly through
  the drying gis hippir duct to terminate in a capped
  hipper end discontrolly of the diving gas supply
  duct.
- (d) an atomizing spitch ad disposed at the central opening in the fit of said nomizing spray head housing and may head housing its means extending through the central opening for in reducing the slurry to be died in a said dryllar chamba.
- (c) an ionicial solution in did to and extending loving a torn in did to the point pear which a core is faid guide tibe flare out a live a deal some forming in extension of the tibule in it on of a liquide tibe into the interior race of the outwards flare thereof
- (f) a support be extending upwardly from said atomizing strathend into said seal sleeve said support tube being slid ably translatable within said seal sleeve and said guide tube so as to permit said support tube and the atomizing spin head attach dithereto to be with driving and the latest argue of the driving as spin duct.
- (a) or progethough sidend tub for suppliera

- (n) first sign come is procide ween said support to be and said services for not drug a case to his sea not well is interested its mizer play had housing and
- (i) colds mains dipolated flower dorald profit diportions against the second transfer of the contact of the con

Complisp n 16 p es. Dig 2 shoets

CI >5 +6 H 88 D

155118

Int. Cl. B01 d 53 00

AN IMPROVED PLOCESS FOR IR COVERING TO LEGAS SUCH AS HYDROGEN FROM FEFTD GAS MEDIUME

\modeling to MONS \NEO COMP \N 800 NORTH LIN DERGED DELEV \RO \TOUS \NISSOURT 63167 UNLED STAFF OF \MFRICA

" not 1 DONALD I WIS GAG MACLEAN

Application No. 286 Call82 file 1 March 12, 1982

Appropriat office for exposition proceedings (Rule 4 P tents Rules 1972) Patent Office Calcutta

#### 13 Claims

An improved process for recovering one gas such as hydroren from a feed gas mixture of said one gas and at least one other gas said feed gas mixture a variable flow characteristic compring

- (a) bringing sud-feed gas mixtue to contact with one sud-of a memb are (such for example a described hareinbefore) more permeable to said one gas than said other gas to allow aid one gas to permeat to the other side of the memb line sud-feed gas mixture being und as fit pressure
- (b) recovering said perm ated none gis from said other sade at a second pressure lower than said first pressure,
- (c) characteris J by arving the temperature of the feed gas mixture prior to said contact in respon to variations in said flow characteristic so that the rate of recovery of said one gas a manifestal a substantially constant value the type rature of the feed gas mixture being varied in a known manner to vary the permeability of said one gas in such a manner that the expression

 $\frac{P/1 \triangle P}{O}$ 

remains substantially content where P 1 is sud per merbility of said one cas. P is the difference in that pressure of said one can be one the membrane and Q is the flow rate. If said field gas mixture

Complished 14 pages Dig NI

CLASS 205E

155119

n Cl H01 p 11 00

METHOD OF FORMING A PORO'S GLASS PREFORM POROUS GLASS PREFORM SO OBTAINED AND AN APPARATUS FOP CARRYING OUT THE SALD METHOD

Ambigant CORNING GLASS WORKS AT HOLK HTON YORK CORNING NEW YORK 14820 S 4

Inventor 1 DAIF ROBERT POWERS

Application No. 638 Cat 82 Ct + Tu + 4, 1092

Appropriate office for opposition proceeding (Rule Patents Rules 1972) Patent Office Calcuta

# <sup>1</sup>4 Claims

A method of roung a polous glass preform comprising noting. I antidevaluation core member directing steam of glass particulate material toward a lateral surface of

said core member to build up a coating of given thickness thereon, rotating said core member with respect to said stream of particulate material while simultaneously longitudinally moving said core member in one direction with respect to said stream of particulate material, and reciprocating said stream of particulate material with respect to a portion of the length of said core member to deposit and build up in the region of reciprocating movement of said stream a coating of thickness which tapers from said given thickness to zero thickness.

Compl. specn. 25 pages. Drgs. 3 sheets.

CLASS: 127-G.

155120.

Int. Cl.: B60 k 25 00, 25 06.

POWER TAKE-OFF OF AN INTERNAL COMBUSTION ENGINE.

Applicant: M.A.N. MASCHINENFABRIK AUGSBURG-VURNBERG AKTIENGESELLSCHAFT OF KATZWAN-GFR STRASSE 101. D 8500 NURNBERG, FEDERAL RE-PT BLIC OF GERMANY.

Invento: 1. HANS GEBHARDT.

Application No. 731 Cal 82 filed June 23, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

### 7 Claims

A power take-off of an internal combustion engine for an auxiliary machine, the power take-off comprising a first gear drivingly connected to an output shaft of the internal combustion engine and engaged with a second gear supported in a bush having an eccentric bore and arranged axially slidable and rotatable in a flanged housing, the second, gear being connectible to an input shaft of the auxiliary machine, wherein the axial spacing between the eccentric bore and the output shaft of the internal combustion engine is variable by variation of the angular orientation of the bush in the flanged housing, so as to change in use the step up or step-down ratio.

Compl. speen. 9 pages. Drgs. 2 sheets.

CLASS: 32-E; 40-B.

155121.

Int Cl : B01 j 11|00; C08 f 1|00, 3|00.

A CATALYTIC FLUID BED PROCESS FOR PRODUCING ETHYLFNE POLYMFRS.

Applicant: UNION CARBIDE CORPORATION, AT 270 PARK AVENUE, NEW YORK, STATE OF NEW YORK 10017, UNITED STATES OF AMERICA.

Inventors: 1 ANTHONY DAVID HAMER, 2. FREDERICK JOHN KAROL.

Application No. 955|Cal|82 filed August 16, 1982.

Division of application No. 1347 Cal 79 dated 27th December, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

# 8 Claims

A catalytic fluid bed proce them polymers selected from the group hompolymers and copolymers with a Ti containing catalyst such as herein described at a productivity of  $\geq 50,000$  pounds of polymer per pound of Ti under a pressure of  $\leq 1000$  psi in the gas phase.

said polymer being produced in granular spherical form having a particle size of from about 250 to about 2550 microns and having a density of  $> 0.91 \le 0.97$  and melt flow ratio of > 22 to  $\le 32$ 

p is 
$$\geqslant$$
 2 to  $\leqslant$  116

wherein R is a  $C_1$  to  $C_{14}$  aliphatic or aromatic hydrocarbon radical. or COR! wherein R' is a  $C_1$  to  $C_{14}$  aliphatic or aromatic hydrocarbon radical, X is Cl, Br, I, or mixtures thereof,

CD is an election donor compound, Filler is an inert filler compound, and based on the total weight of said composition,

m is 
$$\geqslant 0.5$$
 to  $\leqslant 56$   
n is 0 or 1,  
n is  $\geqslant 2$  to  $\leqslant 116$ 

has value such that the percent filler is from 10 to 95 weight percent based on the total weight of said composition; said precursor composition being treated with 10 to 500 mols of an activator compound such as herein described per mol of Ti in said precrusor composition to transform the Ti atoms in the precursor composition to an activated state,

said activator compound having the formula

wherein X is Cl or OR''', R'' and R''' are the same of different, and are  $C_1$  to  $C_{14}$  saturated hydrocarbon radicals, c is 0 to 1.5 c is 1 or 0 and c+d+e=3.

Compl. specn. 47 pages. Drg. 1 sheet.

CLASS: 32B, 32F3d, 55D2

155122

Int. Cl.: A01n, 9|00, C07c, 5|12.

IMPROVEMENTS IN OR RELATING TO A PROCESS FOR THE PREPARATION OF (-)-3-CAREN-5-ONE.

Applicants: CAMPHOR AND ALLIED PRODUCTS LIMITED, AN INDIAN COMPANY, JEHANGIR BUILDING, 133, MAHATMA GANDHI ROAD, BOMBAY-400 023. MAHARASHTRA, INDIA.

luventors: (1) DR. AMAR NATH MISRA, (2) MR. VEEJENDRA KUMAR YADAV, (3) DR. RAGHAVAN SOMAN AND (4) DR. SUKH DEV.

Application No. 219 Bom 1982 filed on Aug. 27, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

# 8 Claims

A process for the preparation of (-)-3-caren-5-one of structural formula  $\mathbf{I}$ 



from (+)-3-carene of structural formula II



comprising (i) the oxidation of (+)-3-carene with oxygen or air at a temperature such as herein described, in presence of a catelyst and a co-catalyst such as herein described and in quantities such as herein described to give a produce containing 10 to 30 per cent (-)-3-caren-5-ore and having a reroxide content of 0 to 30 percent. (ii) thin film flash distillation of the oxidation product as obtained in step (i), using a falling film evaporator as shown in figure 2, in a manner such as herein described to give a 'first distillate', a 'second distillate' and a 'residue such as herein described, and, (iii) account fractional distillation of the 'second distillate' to give (-)-3-caren-5-one of structural formula I

Comp. Specn. 5 pages, Drgs. 2 sheets.

CLASS: 32 F 32b + 55 D 2.

155123.

Int. Class: C07c 61|00, 61|04, A01n-9|00.

A PROCESS FOR THE PREPARATION OF (-)-IR-CIS-3, 3-DIMETHYL-2-(2:-OXO) PROPYL CYCLOPROPANE-1-CARBOXYLIC ACID FROM (+)-CIS-4-CAREN-3-OL.

Applicants: CAMPHOR & ALLIED PRODUCTS LTD., JEHANGIR BUILDING, 133 MAHATMA GANDHI ROAD, BOMBAY-400 023, MAHARASHTRA, INDIA.

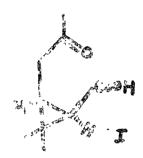
Inventors: 1. DR. MAMILAPPALLI RAMBHADRA SARMA, (2) DR. RAGHAVAN SOMAN & (3) DR. SUKH

Application No. 243 Bom 1982 filed Sept. 17, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

# 3 Claims.

A process for the preparation of (-)-IR-cis-3, 3-dimethyl 2-(2'-oxo) propyl cyclopropane-1-carboxylic acid of structural formula I



(+)-cis-4-caren-3-ol of structural formula II



which comprises (i) treating a solution of (+)-cis-4-caren-3-ol in a solvent such as herein described at a temperature of —100 deg. C to + 30 deg. C, with ozone leading to the formation of an ozonide, and (ii) treating the said ozonide with chromic acid.

Complete specification 7 pages, Drawing 1 sheet.

CLASS: 32F3d, 55D2.

155124.

Int. Cl.: C07c 49|76; A01n 9|00.

IMPROVEMENTS IN OR RELATING TO A PROCESS FOR THE PREPARATION OF THE ENOL LACTONE OF (-)-1R-cis-3, -3DIMETHYL 2-(2'-OXO) PROPYL CYCLOPROPANE-1-CARBOXYLIC ACID.

Applicants: CAMPHOR AND ALLIED PRODUCTS LIMITED, JEHANGIR BLDG., 133, MAHATMA GANDHI ROAD, BOMBAY-400 023, MAHARASHTRA, IN-

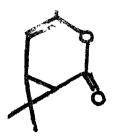
Inventors: (1) DR. (MISS) DEEPA GUPTA, (2) DR. RAGHAVAN SOMAN AND (3) DR. SUKH DEV.

Application No. 244 Bom 1982 filed on Sept. 17, 1982.

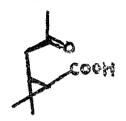
Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office, Bombay Branch.

### 3 Claims.

A process for the preparation of the enol lactone of structural formula I



from (-)-1R-cis-3, 3-dimethyl 2-(2'-oxo) propyl cyclopropanel-carboxylic acid of structural formula H



which comprises (i) the cyclodehydration of the said (-)-IRcis-3, 3-dimethyl-2-(2'-oxo) propyl cyclopropane carboxylic acid with 1.0 to 1.5 mole equivalents of an organic acid anhydride such as acetic anhydride at a temperature of O deg C to 50 deg. C in presence of catalytic quantities of a cation exchange resin such as herein described. (ii) removal of the said cation exchange resin, from the resulting reaction mixture obtained from step (i), by filtration, and, (iii) fractional distillation of the filtrate obtained from step (ii) to separate unreacted organic acid anhydride such as acetics anhydride during the cyclodehydration reaction and the organic acid such as acetic acid formed from the said organic acid anhydride in step (i) as the first fraction and the enol lactone of structural formula I as a second fraction which comprises (i) the cyclodehydration of the said (-)-IR-

as a second fraction.

Complete Specification 8 pages, Drg. Sheet 1.

CLASS: 32 Fd; 55 D 2.

155125.

Int. Class: A01n 9|00, C07c-35|00.

IMPROVEMENTS IN OR RELATING TO A PROCESS FOR THE PREPARATION OF THE HEMACETAL OF (-)-IR-cis-3, 3-DIMETHYL 2-FORMYL CYCLOPROPANE-1-CARIOXYLIC ACID FROM THE ENOL LACTONE OF (-)-IR-cis-3, 3-DIMETHYL 2-(2-OXO) PROPYL CYCLO-PROPANE-1-CARBOXYLIC ACID.

Applicants: CAMPHOR & ALLIED PRODUCTS LTD., JEHANGIR BUILDING, 133 MAHATMA GANDHI ROAD, BOMBAY-400 023, MAHARASHTRA, INDIA.

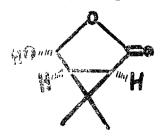
Inventors: DR. (MISS) DEUPTA, GUPTA (2) DR. RAGHAVAN SOMAN & (3) DR. SUKHDEV.

Application No. 245 Bom 1982 filed Sept. 17, 1982.

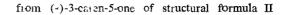
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

# 4 Claims.

An improved process for the preparation of the hemiacetal of (-) IR-cis-3, 3-dimethyl 2-formyl cyclopropane-1-carboxylic acid of structural formula I



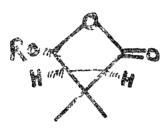
from the enol lactone of (-)-IR-cis-3, 3-dimethyl 2-(2'-oxo) propyl cyclopropane-1-carboxylic acid of structural formula





which comprises:

(i) ozonisatio 1 of said enol lactone of (-)-IR-cis-3, 3-dimesthyl 2-(2'-oxo) propyl cyclopropane carboxyl'c acid in anhydrous lower aliphatic alcoholic solvents such as herein described with ozone to give a-oxyalkyl hydroperoxide; (ii) reduction of the said a-oxyalkyl hydroperoxide with an organic sulfide such as herein described or pyridine or thiourea to give the lactol alkyl ether of (-)-IR-cis-caronaldehydic acid of structural formula IV



and; (ii) hydrolysis of the said lactol alkyl ether of (-)-IR-cis-earnoldehydic acid with dilute oxalic acid.

Complete specification 9 pages; Drawing 1 sheet.

CLASS: 32 F 3 b, 55 D 2

155126

Int C1:  $\sqrt{01n-9}|00$ , C07c 65|00.

A PROCESS FOR THE PREPARATION OF (-)-1R-CIS-3, 3-DIMETHYL 2-(2,-OXO) PROPYL CYCLOPROPANE-1-CARBOXYLIC ACID FROM (-)-3-CAREN-5-ONE.

Applicants: CAMPHOR AND ALLIED PRODUCTS LIMITED, JEHANGIR BUILDINGS, 133, MAHATMA GANDHI ROAD, BOMBAY-400 023, MAHARASHTRA, INDIA.

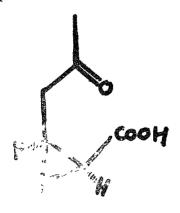
Inventors: 1 DR (MISS) DEEPA GURTA. (2) DR. AMARNATH MISRA, (3) DR. RAGHAVAN SOMAN & (4) DR. SUKH DEV.

Application No. 246 Bom 1982 filed Sept. 17, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

# 4 Claims

A process for the preparation of (-)-IR-cis-3, 3-dimethyl 2-(2'-oxo) propyl cyclopropane-1-carboxylic acid of structural formula I





comprises: (i) ozonisation of (-)-3-caren-5-one with ozone in a solvent such as herein described and at a temperature of -100°C to 30°C leading to the formation of peroxidic compound, and, (ii) decomposition of the said peroxidic compound with reagents such as herein described.

Complete specification 10 pages. Drawings 1 sheet.

CLASS: 49 G

155127

Int. Cl.: A 47j-35|08.

Title: IMPROVEMENTS IN OR RELATING TO SANDWICH TOASTERS.

Applicants: MI.ERA METAL INDUSTRIES, (A RE-GISTERED PARTNERSHIP FIRM) 32/2, 2ND PANJAR-POL LANE, C.P. TANK ROAD, BOMBAY 400 004, MAHARASHTRA, INDIA.

Inventor: ZAVERCHAND SHAH.

Application No.: 61|Bom|1983 filed on February 23, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Potent Office, Bombay Branch.

#### 5 Claims

An improved sandwich toaster comprising of two square metallic housing members placed just opposite to each other such that one of which fits onto the other housing member to form a cavity between the members, each of the said housing members are connected to handle characterised in that one or both the housing members are provided with a diagonal projection projecting into the said cavity formed between the two said housing members.

Complete Specn. 7 pages.

Drg. 1 sheet.

CLASS:  $32 F_1 + 55 D_2$ 

155128

Int. Cl.: C07c 121|66, 121|68.

AN IMPROVED PROCESS FOR THE PREPARATION OF 3-METHYL-2-(4-HAI.OGENOPHENYL)-BUTYRONITRILE.

Applicants . M|S. CAMPHOR & ALLIED PRODUCTS LIMITED, JEHANGIR BUILDING, 133, MAHATMA GANDHI ROAD, BOMBAY-400 023, MAHARASHTRA, INDIA.

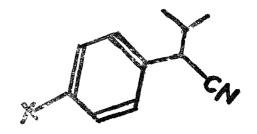
Inventors: 1. MR. RAJKUMAR KHEMCHANDANI, 2. DR. SUDERESAN MADHUSOODANAN AND 3. DR. SUKH DEV.

Application No. 72|Bom|1983 filed March 5, 1983.

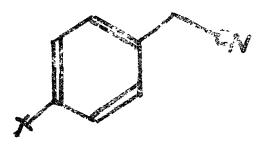
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

# 9 Claims

An improved process for the preparation of 3-methyl-2-(4-halogenophenyl)-butyronitrile of structural formula [



by alkylation of p-halogenophenylacetonitrile of structural formula II



in alkaline medium such as herein described using isopropylhalide of structural formula IV

and the said reaction is carried out in the presence of a catalyst such as a high molecular weight polyoxyethylene glycol of structural formula V



with a solvent such as herein described.

Compl. specn. 7 pages.

Drgs. 1 sheet.

CLASS: 179B

155129

Int. Cl.: B 67b-3|00.

Title: A MFTHOD OF MANUFACTURING A POLY VINYL CHLORIDE COMPOUND LINED ALUMINIUM SEAL FOR BOTTLES/CONTAINERS AND A SEAL MANUFACTURED THEREBY.

Applicants: RAJENDRA SOMANI, ORIENTAL CONTAINERS LTD., 1076, DR. E. MOSES ROAD, WORLI, BOMBAY 400 018. STATE OF MAHARASHTRA, INDIA.

Inventor: HFRALD LIEBSCH.

Application No.: 161 Bom 1983 filed on May 11, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

# 4 Claims

A method of manufacturing a Poly Vinyl Chloride compound lined aluminium seal for bottles/containers which comprises:

- (a) printing the roll of aluminium foil of about 0.18 mm thickness in a known manner;
- (b) punching the printed roll of aluminium foil in a high speed press forming a cap having integrally a circular top and skirt/side with a small projection making an oblique angle at its bottom periphery and a scoring previded in the said skirt, the said scoring starts from a junction point of said projection and the skirt and extends along the side of the
- (c) spraying the poly vinyl chloride compound by a nozzle at the inner border of the said cap to provide PVC lining;
- (d) and drying the said PVC lined cap in an oven at a regulated temperature to obtain said seal.

Compl. specn. 9 pages.

Drg. 1 sheet.

CLASS: 32 F 3 a - 55 D 2

155130

Int. Cl.: A010 -2/00, C07c 43/30.

A PROCEST FOR THE PREPARATION OF DIALKY-LACETAL OF ALKYL IR-CI-CARONALDEHYDIC ESTER FROM THE ENOL LACTONE OF IR-CIS-3, 3-DIMETHYL 2-(2'-OXO)PROPYL CYCLOPROPANE-1-CARBOXYLIC ACID.

Applicants: CAMPHOR & ALLIED PRODUCTS LTD., JEHANCIR BUILDING, 133, MAHATMA GANDHI ROAD, BOMBAY-400 623, MAHARASHTRA. INDIA.

Inventors: 1. DR. (MISS) DEEPA GUPTA, 2. DR. RAGHAVAN SOMAN, AND 3. DR. SUKH DEV.

Application No. 178, Bom 83 filed May 28, 1983.

Appropriate office for opposition proceedings (Rule 4. Patents Rule, 1972), Patent Office, Bombay Branch.

#### 8 Claims

A process for the preparation of dialkylacetal of alkyl IR-cis-caronaldehydre ester (dialkylacetal of alkyl IR-cis-3. 3-dimethyl 2-formyl cyclopropane-1-carboxylic ester) of structural formula I



from the enol lactone of 1R-cis-3, 3-dimethyl 2-(2 oxo) propyl cyclopropane-1-carboxylic acid of structural formula II



which comprises:

- (a) openisation of the sail end lactone in anhydrous lower aliphatic alcoholic solvent such as methanol of ethanol with exone at a temperature of  $-100^{\circ}$ C to give  $\alpha$ -oxyalkyl hydroperoxide.
- (b) reductive decomposition of the said ∞-oxyalkyl hydrogeroxide with an organic sulfide as herein described or with pyridine or thiousea to give lactol alkyl ether of IK-cis-caronaldehydic acid of structural formula VI.



and



VJ

# VII

(c) alcoholysis of the said lactol alkyl ether of 1R-ciscaronaldehydic acid as obtained from step (b) with anhydrour lower alphatic alcohol such as methanol or ethanol, already present in the reaction medium (rep b), in presence of an acid catalyst such as p toluene sulfonic acid to give dialkylacetal of alkyl IR-ciscaronaldehydic ester of structural formula I

Complete speen 10 pages

Drg. Nil

CLASS: 32F 3a+55 D 2

155133

Int. Cl.: A01n-9/00.

A PROCESS FOR THE PREPARATION OF ALKYL IR-CIS-CARONALDEHYDIC ESTER FROM THE ENOL LACTONE OF IR-CIS-3, 3-DIME/THYL 2-(2'-OXO) PROPYL CYCLOPROPANE-1-CARBOXYLIC ACID.

Applicants: CAMPHOR AND ALLIED PRODUCTS JEHANGIR BUILDING, 133, MAHATMA GANDHI ROAD, BOMBAY-400 023, MAHARASHTRA, INDIA.

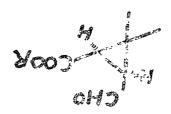
Inventors: 1. DR (MISS) DEEPA GUPTA, 2. DR. RAGHAVAN SOMAN, AND 3. DR. SUKH DEV.

Application No. 179 Bom 1983 filed on May 28, 1983.

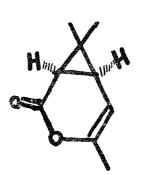
Appropriate office for opposition preceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

#### 3 Claims

A process for the preparation of alkyl 1R-cis-cironaldehydic ester alkyl 1R-cis-3, 3-dimethyl 2-formyl cyclopropanel-carboxylic ester) of structural formula I



the each lactone of (-) -1R-cis-3, 3-dimethyl 2-(2-oxo) propyl cyclopropane-1-carboxylic acid of structural formula II

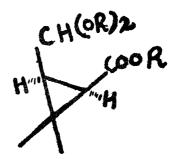


# which comprises:

- (a) ozonisation of the said enol lactone of (-)-1R-cis-3, 3-dimethyl 2-(2'-oxo) propyl cyclopropane-1-carboxylic acid in anhydrous lower aliphatic alcoholic solvent such as methanol or ethanol with ozone at a temperature of -100°C to + 30°C to give aoxyalkyl hydrops:oxide.
- (b) reductive decomposition of the said a-oxyalkyl hydroperoxide with an organic sulfidt such as herein described or with pyridine or thiourea to give the lactol alkyl ether of 1R-cis-caronaldehydic acid of structural formula VII



(c) alcoholysis of the said lactol alkyl ether of 1R-ciscaronaltehydic acid as obtained from step (b) with anhydrous lower aliphatic alcohol such as methanol or ethanol, already present in the reaction medium (step b), in presence of an acid catalyst such as p-toluene sulfonic acid to give dialkylacetal of alkyl IR-ciscaronaldehydic ester of structural formula I



(d) hydrolysis of the said dialkyl acetal of alkyl IR-cis-caronaldehydic ester as obtained from step(c) with water and an acid catalyst such as p-toluene sulfonic acid, already present in the solution (step c), to give alkyl IR-cis-caronaldehydic ester (alkyl IR-cis-3, 3-dimethyl 2-formyl cyclopropane 1-carboxylic ester).

Complete specn 10 pages.

Drg. Nil.

CLASS: 129Q, G.

155132.

Int. Class: B23k 9|00, 33|00.

"A OEVICE FOR AIR AND ARC GOUGING EDGES OF MEMBERS OF METAL TO BE WELDED.

Applicant: BHARAT HEAVY ELECTRICALS LTD., OF 18-20, KASTURBA GANDHI MARG, NEW DELHI-110001, INDIA, AN INDIAN COMPANY.

Inventors: DEXTOR ALMEIDA, SUBRAMONIA KRISHNAN, ARUMUGHAM SHANMUGHAM, ARDHENDU MOULI MOHANTY.

Application for Patent No. 585 Del 80 filed on 12th August. 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

### 9 claims

A device for air and arc gouging of edges of metal members to be welded together comprising a pair of oppositely driven rollers for feeding a carbon electrde, swivel plate for adjusting angle of inclination of the electrode relative to the metal member the edge of which is being gouged, and a nozzle, for blowing compressed air for removing the molten metal in the vicinity of the arc formed between the electrode and the metal member, the device being mounted on an electrically driven carriage the speed of which is controllable.

(Complete specification 8 pages. Drawing 2 sheets).

CLASS: 32 B. 40 B.

155133

Int. Class: C07c, 1|00, 3|00 C10g-11|00.

"A PROCESS FOR PRODUCING HYDROCARBONS".

Applicant: IMPFRIAL CHEMICAL INDUSTRIES PLC formerly known as IMPERIAL CHEMICAL INDUSTRIES LIMITED, A BRITISH COMPANY OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SWIP 3JF, ENGLAND.

Inventor: THOMAS VINCENT WHITTAM & MICHAEL ST'ANES SPENCER.

Application for Patent No. 746|Del|1980 filed on 13th October, 1980.

Conven in: c 2nd November, 1979 7937982 (U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110 005.

# 14 claims

A process for producing a hydrocarbon containing 6 or fewer carbon atoms in the molecule which comprises reacting a feedstock comprising a hydrocarbon different from the intended product and/or an oxygenated hydrocarbon and containing 2 or more carbon atoms in the molecule and/or a hydrocarbon derivative containing hydrogen-carbon links over a catalyst comprising reolite CMH

(Complete specification 15 pages).

CLASS: 67A & 7

155134.

Int. Class: G085 13'22 29'00

"A THEFT PREVENTION IND BURGLAR ALARM DEVICE.".

Applicant: SACHINDRA NATH SEN, AN INDIAN NATIONAL OF MC AP 17, MINI C MPUS LLT, NFW DFLHI-110029 INDIA

Inventor · SACHINDRA NATH SEN

Application for Patent No. 761 Del'80 fled on 16th October, 1980.

Addition to Patent application No. 106'Dell79 filed on 15-2-1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Brauch New Delhi-5

#### 5 claims

A theft prevention and burelar alarm device claimed in claim 1 of the specification of Indian Patent Application No 106|Del|79 characterized in that an auxiliary switch is provided in the switching circuit which allows the switching circuit to be connected to the power source even when the embination code unit a set to a code other than the correct code but accombined but only after the unit has been first properly set to the code.

(Complete specification 8 nuses Drawing 2 sheets).

CLASS: 116 C.

155135.

Int. Class: B65g 15|30

"CABLE BELTS FOR CONVEYERS".

Applicant - THE GOODYEAR TIRE & RUBBER COMPANY, A CORPORATION ORGANICTO UNDER THE LAWS OF THE STATE OF CHIO, UNITED STATES OF AMERICA, HAVING OUP PRINCIPAL PLACE OF BUSINESS AND A FOST OFFICE ADDRESS AT 1144 FAST MARKET STREET ARON, OHIO, UNITED STATES OF AMERICA.

Inventor: LARRY WAYNF IFNSEN.

Application for Patent No. 764|Del|80 filed on 16th October, 1980

Appropriate Office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

# 4 clalims

A wide cable belt from which more than one narrower slit cable belts will be formed, the wide cable belt being composed of a plurally of spaced and parelly cables embedded in polymeric compount wherein each narrower alit cable belt has a longitudinal centerline dividing a plurally of cable pairs, each pair being composed of a first cable which is spaced transvesely away from the longitudinal centerline of the slit cable belt by a distance exactly equal to the distance between the centerline and a second cable of each pair the first cable of each cable nair being of different cross sectional area than the second cable of the pair due to uneven tensioning of the cables during manufacturing such that asymmetrical tensioning about the longitudinal centerline of each slit belt results, wherein the improvement is characterized in that the first cable in the improvement is characterized in that the first cable in the improvement is characterized in that the first cable in the cable of each cable of the first cable and second cable during manufacturing resulting in equal tension being exerted between each cable pair and the polymeric compound surrounding

each coble such that each a mover slit cable belt has symmetrical tenion anout the longitudinal centerline of the slit belt.

(Complete specification 23 pages Drawing 2 sheets).

CLASS: 85B, 97H

155136

Int Class: F274 1'99 11'00.

"IMPROVEMENTS IN OR RELATING TO ELECTRIC ARC FURNAC" FOR MELTING STEEL".

Applicant PARTAP STEEL ROLLING MILLS. PRIVATE LIMITED A14, KALINDI, NEW DELHI-110 065 (INDIA) AN INDIAN COMPANY REGISTERED UNDER THE COMPANIES ACT, 1956.

Invento's : ANAKARA VADAKATH RAVINDRANATH, KANTI CHANDRA KELA AND RAJENDER KUMAR MAHESHWARI.

Application for Patent No 766 De 180 filed on 21st October, 1980 Complete specification left on 13th January, 1982.

Appropriate Office for opposition proceedings (Rule 4, Potents Rules, 1972) Patent Office Branch New Delhi-

### 3 claims

An improved electric are furnace consisting of a refractory lined metal shell having a removable roof, tapping launder at the real to pour the furnished steel, service doors, graphite electredes, held in clamps on the and of the supporting mand pass through holes in the furnace roof, the roof and electrodes are capable of being mised and swung aside in a horizontal plane, to allow charging of raw material into the furnace characterized in that a metallic water cooling jacket consisting of a number of sections each action having a separate water inlet and a separate water outlet is provided on the outer surface of he furnace.

(Provisional specification 4 pages.

(Complete specification 7 pages Drawing 2 sheets).

CLASS: 47-A, 84C, 56C

155137.

Int Class: B035 3100, C101 002.

"A CHEMICAI PROCESS FOR DEMINFRALISATION OF CARBONACEOUS MATERIALS, SUCH AS COAL AND COKE".

Applicant COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEAPCH RAFL MARG, NEW DELHI-1, INDIA, AN INDIAN REGISTERED BODY INCORPORATED LINDER THE REGISTRALION OF SOCIETIES ACT (ACT XYL OF 1860)

Inventors AMAR NATH SENGUPTA AND BHUPEN-DRA KRISHNA MAZZIMDA T

Application for Patent No 774 Del 80 filed on 25th October, 1980

Appropriate Office to opposition proceedings (Rule 4, Patents Rule 1972) Patent Office Branch, New Delhi-110005.

# 6 claims

A process for the demineralisation of carbonaceous material such as coal or coke, for the production of low ash (17 per cent or less) coal or coke which comprises in treating the high ash (above 17 to 35 percent) carbonaceous material with one or more alkalis selected from the reciprocard cauctic potash code ash and line at a term reture ranging between 100 and 400°C for a paried varying form 1 to 5 hours under two pasts pressible during which treatment reaction between 11 all matter in the carbonaceous material and alkali takes place to form water soluble salits of ordium and acid soluble codio all mines complexes, following which the release is diluted with water whereafter the alkali treated cold carbonaceous material is separated from the spent alkalian liquid by filtration or centrifugation following which the solubles and the filtration of centrifugation following which the soil alkali treated material is further treated to highly the mines of alkalianterial is further treated to highly the mines of a lacid (e. or 1.2N H-BO<sub>1</sub>) to dissolve out the aralised coal or coke.

(Complete specification 17 pages),

CLASS: 130F.

155138

Int. Class: C22b 53 00.

"PROCESS FOR EXTRACTING TITANIUM VALUES FROM TITANIFEROUS BEARING MATERIAL".

Applicant: NL INDUSTRIES, INC., A CORPORATION OF THE STATE OF NEW JERSEY, HAVING A PRINCIPLE PLACE OF BUSINESS AT 1230 AVENUE OF THE AMERICAS, NEW YORK, NEW YORK-10020, UNITED STATES OF AMILRICA

Invento: : BRIAN ROBERT DAVIS

Application for Patent No 814 Del 30 filed on 18th November 1980

Appropriate Office for opposition proceedings (Rule 4, Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

#### 8 claims

A process of extracting titanium values from titaniferous bearing material of the kind such as herein described which comprises:

- (1) preparing a reaction mixture containing a titaniferous bearing material of the kind such as herein described in an amount between 10% and 400% above the stoichiometric amount of titaniferous bearing material necessary to react with sulfuric acid to provide titanyl sulfate, and a dilute sulfuric acid solution having a concentration between 25% and 60% by weight:
- (2) maintaining the temperature of the reaction mixture below 140°C in a reaction vessel;
- (3) extracting the titanium values by circulating the reaction mixture in an agitation column located within the reaction vessel in a direction counter-current to the flow of the reaction mixture in the annular space located between the agitation column and the inner vessel wall, the circulation being in a manner to maintain the titaniferous bearing material in a continuous turbulent suspension flow in the agitation column;
- (4) cooling the resulting reaction mixture to a temperature below 110°C without precipitating the reaction mixture; and
- (5) discharging the reaction mixture from the reaction vessel and recovering the extracted titanium values.

(Complete specification 27 pages. Drawing 2 sheets).

CLASS: 70C 155139.

Int. Class: C23b 9|02.

"AN IMPROVED PROCESS FOR THE SEALING OF SUBSTRATES OF ANODISED ALUMINIUM AND ANODISED ALUMINIUM ALLOYS".

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NE WDELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: BALKUNJE ANANTHA SHENOI, SUBBIAH JOHN, NANDAGOPAL VARADAPPA SHANMUGHAM, KUMANDUR NARAYANAN SRINISASAN AND MARIAPPAN SELVAM.

Application for Patent No. 815 Del 80 filed on 21st November, 1980.

Complete specification left on 16th February, -1982.

Appropriate office for opposition proceedings (Rule 4. Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

# 5 claims

An improved process for the sealing of substrates of anodised aluminium and anodised aluminium alloys comprising subjecting the anadised substrates to treatment in an aqueous bath consisting of a hydrolysable salt of an alkali or alkaline earth metal hypophosphite admixed with an hydroxy carbovylic acid such as herein described or a water soluble sodium or potassium salt of said hydroxy carboxylic acid or sodium or potassium salt of acetic acid at a temperature of 30° to 50°C for 10 to 20 minutes at a pH between 5 and 7.

(Provisional specification 6 pages Complete specification 8 pages).

CLASS · 130I, 39 P

155140.

Int. Class: C22b 7'04

"IMPROVED PROCESS FOR THE EXTRACTION OF METAL VALUES LIKE COPPER, NICKEL AND COBALT FROM COPPER CONVERTER SLAGS".

Appleinat: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AND INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: SHASHI ANAND, KATRAGADDA SARVESWAR RAO, PRAFULLA KUMAR JENA.

Application for Patent No 819 Del 80 filed on 21st November, 1980.

Appropriate office for opposition proceedings (Rule 4. Patents Rule, 1972) Patent Office Branch, New Delhi-110005.

#### 6 claims

Improved process for the extraction of metal values like copper, nickel and cobalt from copper converter slag comprising leaching the same with dilute sulphuric acid at a temperature of 100-130°C and a pressure of 5 to 8 Kg|cm² in the presence of oxygen obtain leach liquor containing the metal values as soluble sulphates in the filtrate.

(Complete specification 5 pages).

CLASS: 143 D. & 179 F.

155141.

Int. Class: B65d 85|00.

"PACKAGING APPARATUS FOR FORMING A SFRIES OF CONNECTED CONTAINERS FROM AN ELONGATE SYNTHETIC FILM AND FILLING AND SEALING THE CONTAINERS SO FORMED"

Applicant: SOCIETE GENERALE DES EAUX MINERALES DE VITTEL, A FRENCH COMPANY, OF 88 800-VITTEL (BOITE POSTBLE 43), FRANCE.

Inventor: RAOUL GAUTIER.

Application for Patent No 827 Del 80 filed on 24th November, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

# 7 claims

Packaging apparatus for forming a series of connected containers from an elongate synthetic film and sequentially filling and sealing the containers so formed comprising:

an assembly for supporting a supply of synthetic film,

means for unwinding a supply of synthetic film and for feeding the film to a forming station for forming the film into connected containers having an open mouth through which they can be filled, and a rotatable turret which is located downstream of the forming station and which includes means for indexing the turrent between stations for filling and sealing the containers while connected in the form a strop.

said turret carrying a plurality of grinner means, each gripper means being mounted on a reprecive slide for movement radially of the turret, the gripper means being arranged to grip a container and convey it through the filling and sealing stations, the position of the gripper means on ther slides being controlled during indexing movement of the turret by a cam so that the gripper means are guided in a generally inward spiral path whereby the distance between neighbouring cripper means is reduced sufficiently to substantially compensate for increased tension in the film which would otherwise arise on filling the containers

(Complete specification 25 pages. Drawing 10 sheets).

CLASS: 70B.

155142.

Int. Class: G01n 27 30.

"PROCESS FOR THE PULLARATION OF ELECTRODES WITH CHLORIDE ION SENSITIVE MEMBRANE".

Applicant: COUNCIL OF SCHENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARC NEW DELHI-, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: GOLLALOTA PRABHAKAR RAO, NAVIN CHANDRA, GANESA GANAPADIGAI SUBRAMANIAN.

Application for Patent No \$29'Del 80 filed on 25th November, 1980.

Complete spraise, tion I fe on 11th February, 1981.

Appropriate office for opposition proceedings (Rule 4, Patents Rule 1972) Potent Office Branch, New Delhi-110005,

# 4 claims

A process for the preparation of electrodes with chloride ion sensitive membrane comprising compressing a composite powder of Ag S-AgCI containing 50-85 mole per cent of AgCI and having particle size in the range of 50-150 micron at room temperature and at a pressure ranging from 67 tons'em for 10-30 minutes to form a mechanically strong membrane and mounting the scid metabrane in an electrode body consisting of a cylindrical glass or poly vinyl chloride tube by means of an epoxy tesin.

(Provisional specification 5 pages).

(Complete specification 8 pages.

Drawing 1 sheet).

CLASS + 32F \_(,) 55D

155143.

Int. CI: C07 c 103[00

A PROCESS FOR PREPARING CYCLOPROPANE CARBOXYLIC ACID ESTER DERIVATIVES".

Applicant: SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B. V. A NETHERLANDS COMPANY OF CARFL VAN BYLANDTLAAN 30. THE HAGUE, THE NETHERLANDS.

Inventors: MICHALI JOHN BULL & BASIL TERENCE GRAYSON.

Application for patent No. 836 Del 80 filed on 25th November, 1980,

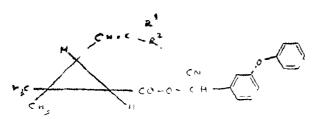
Convention date 27th November, 1979|7940856 & 7940857| (U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

# 8 Claims

A process for preparing a compound of formula I

# Formula I



wherein R<sup>1</sup> and R<sup>2</sup> are each independently selected from chlorine, bromine and methyl, in the form of a 1:1 mixture of the IR cisS- and IScisR- isomers substantially free of IScisS- and IRcisR- isomers, which comprises treating a mixture of the IRcisS. IScisS. IRci R IScisR- isomers of a compound of

formula I with a solvent such as herein described, and separating off by a method such as herein described as 1:1 mixture of the IRCIS and iScirR-isomers substantially free of IRCISR-and ISCISS-isomers as a crystalline solid from a solution of the compound of formula I which contains ISCISS- and IRCISR-isomers and, if desired treating the sud solution with a base such as herein described and separating off in a known method the 1:1 mixture of the IRCIS and ISCISR- isomers during of after the treatment with the base.

Compl. speen 17 pages. Dig. 1 sheet.

CLASS: 19C & 131B<sub>3</sub>.

155144.

Int. Cl.: P21d 15 00.

"IMPROVEMENTS IN OR RELATING TO MINE ROOF BOLT ASSEMBLY".

Applicant: BIRMINGHAM BOLT COMPANY OF P.O. BOX 1208, BIRMINGHAM, ALABAMA 35201, UNITED STATES OF AMERICA AND JIM WALTER RESOURCES, INC. OF 35TH AVI NUF NORTH, BIRMINGHAM, ALABAMA 35202, UNITED STATES OF AMERICA.

Inventors: CLAUDE CARLOS WHITE & FREDERICK CARR.

Application for Patent No. 849 Del 80 filed on 27th November 1980

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

# 20 Claims

A mine 100f bolt assembly for insertion in a bore in a mine roof, said 100f bolt assembly comprising a shank. a first means such as herein described for anchoring one end of said shank in said mine roof at the back end of the bore; a head member having a bore engaged with the opposite end of said shank; a second means such as herein described for permitting rotational movement of said head member with respect to said shank and relative longitudinal movement of the head reember with respect to the shank in the direction of the face of the mine roof; a third means such as herein described with the bore of said head member for limiting relative rotational and longitudinal movement of said head member with respect to said shank; said third means being a solid plug which is entirely located within the bore of the head member and is retained in the bore until a predetermined force is exerted thereon by the end of the shank, and being disengagable from said head member on relative rotational and longitudinal movement of the head member with respect to said shank by being brought thereby into engagement with the end of the shank, the force thus applied by the end of the shank to the third means disengaging the third means from the head member, to allow further rotational and longitudinal movement of said head member with respect to said shank unimpeded travel of said shank through said head member and upward movement of the head member towards the face of the mine 100f and a fourth means such as herein described positioned on said shank between said head member and the face of the mine roof, said fourth means being forced upwardly against the face of the mine roof upon movement of the head member towards the face of the mine roof.

Compl. specn. 22 pages. Drgs 2 sheets.

CI ASS : 139C.

155145.

Int C1 · C01b 7/00.

"A PROCESS FOR RECOVERING BROMINE OR HYDROGEN BROMIDE FROM METHYL BROMIDE".

Applicant: IMPERIAL CHEMICAL INDUSTRIES PLC. FORMERLY IMPERIAL CHEMICAL INDUSTRIES LIMITED. A BRITISH COMPANY, A IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SWIP 3 JF ENGLAND.

Inventor: PITFR JOHN VAUGHAN JONFS AND STEPHEN VYNNE NORVAL.

Application for Patent No. 851 DFI 1980 filed on 28th November '80,

Convention date 13th December, 1979|7942974 (UK)

Appropriate office for opposi Rule 4, Patents Rules, 1972) Patent Office 10005

### 16 Claims

A process for recovery to bounde on hydrogen bromide from methyl brounde present in the chilical gas stream obtained by the oxidation of a substituted aromative compound to a carboxylic acid, said process comprising contacting methyl bromide present in said effluent gas stream with oxygen at an elevated temperature in the presence of an oxidation catalyst comprising a noble metal, whereby elemental bromine and or hydrogen bromide are produced from the methyl bromide and are recovered from the gas stream

Compl specn 9 pages

CLASS 169A, B<sub>1</sub>, 195C

155146

Int Ci F41c 11 00

'FLUID FLOW CONTROL UNIT FOR A PISTON AND CYLINDER ASSEMBLY

Applicant AKTIFBOLAGET BOFORS, A JOINT STOCK COMPANY ORGANISED UNDER THE LAWS OF SWEDEN, OF S 691 80 BOFORS, SWEDEN

Inventor OLLE GUSTAVSSON

Application for Patent No 865|Del|80 filed on 2nd December, 1980

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005

### 6 Claims

A fluid flow control unit for a piston and cylinder assembly, said flow control unit adapted for mounting in a fixed position relative to said assembly to control the speed of movement of the piston relative to said cylinder independently of the load on said piston, said unit comprising a first flow control means to control flow of fluid to said cylinder and second flow control means to control flow of fluid from said cylinder, a first longitudinal cam having a varying profile height along its longitudinal cam having a varying a va dinal direction, said first cam coupled to said piston so that the profile of said cam controls the first flow control means the position of the position and by the new countries and the flow of fluid to said cylinder in dependence on the position of the position and by the new to said cylinder and the flow of fluid to said cylinder in dependence on the position of the position and the flow of fluid to said cylinder in dependence on the position of the positi profile height ... said second cam S Tall Concoupled to sa . said second cam controls the second flow cortrol means to control the flow of fluid from said cylinder in dependence on the position of the piston and hence the second cam relative to the cylinder and wherein the first and second cam profiles differ from each other along their longitudinal directions

Compl specn 16 pages Drgs 3 sheets

CLASS 39 P

155147

Int Cl C01f 7|76

"A METHOD FOR THE REMOVAL OF DEPOSITS FORMED IN THE TUBES OF DIGESTING HEAT EXCHANGERS'.

Applicant MAGY \R \LUMINIUMIPARI IROSZT, OF POZSONYI UT 56, ISLIAPISI IILNG \RY, A BODY CORPORATE ORGANISI DUNDER IIII I AWS OF HUNGARY

Inventors ZOLIAN OSVALD, GERGELY VERES, GYULA ODOR, GYORGY LANG & JANOS STEINER

Application for Patent No 866|Del|80 filed on 3rd December, 1980

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005

# 5 Claims

A method for the removal of deposits formed in the tubes of a plant for the digesting of aluminium oxide in a sodium aluminate liquor and thereby restoring said plant to its pristine state, which method comprises

(a) passing a slurry of aluminium oxide mineral in a sodium iluminate liquor th ough a plurality of tubes of said digesting plant while heating said tubes and recovering digestion liquor downstream of said plant;

- (b) passing a cleaning liquid selected from the group which consists of sodium aluminate liquo, sodium hydroxide solution and water through at least one tube of said digesting plant while the latter is heated concurrently with the other tubes thereof which conduct said slurry/through and recovering the heated cleaning liquid downstream of said plant whereby deposits forced in the cube traversed or said cleaning liquid during previous passage of slurry incremough, are dissolved in said cleaning liquid.
- (c) cycrically applying step (b) to each of the tubes of the digesting plant while conducting said shirry as in step (a) through each tube previously suggested to step (b), and
- (d) combining the digestion liquid with the cleaning inquid tecovered from step (b)

Compl specn 11 pages Drg 1 sheet

CLASS 63B, A<sub>1</sub>

155148.

Int Cl H02k-27|00

'AN A C MOTOR'.

Applicant SULTAN SINGH JAIN, B-63, SHANTI-NAGAR, ROORKEE, DISTRICT SAHARANPUR, UTTAR PRADESH, INDIA, INDIAN NATIONALITY.

Inventor SULTAN SINGH JAIN

Application for Patent No 873 DEL|1980 filed on 6th December, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005

#### 1 Claum

An A C MOTOR comprising two stators—an outer stator (15), an inner Stator (12) and a rotor (19) all made of magnetic material sheet stampings (23), wherein both the said stators have a number of slots (22) for winding purposes to be wound by enamelled copper or aluminium wire in three phase or and single phase mode and the rotor (19) is fitted in a cage (6), the said cage (6) is made of copper or aluminium rods (18) passing inrough the peripheral holes (10) drilled or punched on the outer and inner cylindrical surfaces of the rotor (19) and these said rods (18) are welded with copper or aluminium rings (17) on their either sides of the rotor (19), the outer stator (15) is housed in a body (4), the rotor (19) mounted on a hollow shaft (11) the said hollow shaft (11) being made in two parts screwed or bolted centrally on either sides of the rotor (19)-is supported on bush bearings/ball bearings (5), provided on two side covers (21) provided on either sides of the rotor (19) with a requisite air gap (1) for a free motion, the inner stator (12) is rigidly mounted on an axle (2) and fitted inside the said rotor (19) with the requisite air gap (1), said inner stator (12) being fixed with the body (4) through two side supports, (24), the side covers (21) are fitted with the body (4) intough four the rods (26), the hollow shaft (11) having bearings mounted on said axle (2), the current is fed in the outer stator (15) through insulated conductors (13) passing through a hole made in one of the side covers (21) and in the inner stator through insulated conductors (13) passing through an axial hole (9) in the axle (2).

Compl specn 7 pages Drgs 4 sheets

CLASS 6B<sub>1</sub>

155149.

Int CLASS F25j 1|00

"METHOD AND APPARATUS FOR COOLING AND LIQUEFYING A DAY GAS HAVING A LOW BOILING POINT"

Applicant COMPAGNIE FRANCAISE D ETUDES ET DE CONSTRUCTION 'IECHNII', OF 170 PLACE HENRI REGNAULT, 92090 PARIS LA DIFTNST IR NCE, A FRENCH BODY CORPORATE, NO NANI RUGETTI S P.A., OF 20097 S DONATO MILANESE, MILAN ITALY, AN ITALIAN JOINT-STOCK COMPANY

Inventors HENRI PARADOWSKI & ENZO CAETANI.

Application for Patent No 877|Del|80 filed on 8th December 1980

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 17 claims

A method of cooling and liquefying at least one relatively dry gas having a low boiling point of the kind such as herein dry gas having a low boiling point of the kind such as herein defined through heat exchange with at least one part of a light main refrigerating fluid; said light main refrigerating fluid precooled until its at least partial liquefaction through heat exchange with a heavy auxiliary refrigerating fluid, said refriegerating 'fluids being part of an incorporated cold-generating cascade of at least these two refrigerating fluids, each refrigerating fluid consisting of a mixture of several component substances evolving according to a closed loop cooling cycle where each refrigerating fluid undergoes the following steps, at least one compression in the gaseous state for raising the at least one compression in the gaseous state for raising the pressure of said each refrigerating fluid from a low pressure to a higher pressure, at least one preliminary cooling with possible at least partial condensation at said higher pressure through heat exchange with a cooling medium at least one through near exchange with a cooling medium at least one self-refrigeration with total liquefaction and then sub-cooling and thereafter expansion down to said low pressure through subsequent heat exchange (and resulting attendant vaporization) in counter-current relationship with itself before its expansion and to the other refrigerating fluid or with said gas for at least partially liquefying the latter, its low pressure vapor thus reheated being eventually recycled and recompressed, characterised in that the method consists in carrying out said compression at least of said auxiliary refrigerating out said compression at least of said auxiliary refrigerating fluid adapted to pre-cool said main refrigerating 'fluid in several successive separate compressions of gradually increasing amounts and at last the total amount of said auxiliary refrigerating fluid to respectively different pressures namely at least one intermediate pressure and at least one high pressure, at least the last but one compression of which is followed by said at least partial condensation and then subjecting several distinct portions of said high pressure auxiliary refrigerating fluid to respective expansions down at least one intermediate pressure and to said low pressure followed each one by a vaporization of at least the major part at the corresponding expanded pressure; that portion to be expanded to and at least partially vaporized at said low pressure as well possibly as at least one or each other portion to be expanded to and at least partially vaporized at a corresponding intermediate pressure being each one subcooled in the liquid state before its consecutive expansion and vaporization through heat exchange in counter-current relationship with at least one part of itself already expanded previously and then vaporized by said heat exchange, each portion thus vaporized in at least its major part being thereafter recycled for being recompressed; the vaporization at the least intermediate pressure being effected in particular through heat exchange with said gas initially in the moist state to cool the latter thereby resulting in its relative drying through at least partial condensation of its moisture content whereas each aforesaid portion expanded and then vaporized at another lower pressure is also in heat and then vaporized at another lower pressure is also in heat exchanging counter-current relationship with said main refrigerating fluid for cooling and or at least partially condensing

(Complete specification 44 pages

Drawing 5 sheets).

**CLASS** : 208

155150

Int. Cl.: C09d 11|00.

PROCESS FOR THE PREPARATION OF AN IMPROVED DUPI ICATING INK.

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH OF RAFI MARG, NEW DELHI-110001, INDIA. AN INDIAN REGISTERED BODY IN-CORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: PRAMOD KUMAR GUPTA, JITENDRA RAI & HARI SINGH.

Application for Patent No. 880|Del|80 filed on 8th December, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

# 6 Claims

A process for the preparation of an improved duplicating ink which comprises emulsifying at a temperature of from

70° to 90°C, a vegetable oil of the kind such as herein described with an emulsifying agent selected from the metal salts of a fatty acid, adding to the emulsion prepared a pigment and, if necessary, sufficient water to attain the requisite viscosity, and homogenising the mixture thus obtained to provide the desired duplicating ink.

Compi. specn. 8 pages.

CLASS: 33A, 129M

155151

Int Cl : 622d 11,00, 823d 17,06.

HYDRAULIC SHEARS FOR USI ON CONTINUOUS CASTING MACHINES.

Applicant: SINGH & ASSOCIATES OF A-145, GUIRAN-WALA TOWN, DELHI-110009, INDIA, AN INDIAN PARTNERSHIP FIRM OF WHICH THE PARTNERS ARE: RABINDER SINGH, KRISHNAMURTHI RAMA-MARTAM IYER AND BALAKRISHNAN LAKSHINARA-YANAN, ALL INDIAN NATIONALS OF THE ABOVE ADDRESS.

Inventor: RALINDER SINGH.

Application for Patent No. 888 Del 80 filed on 12th December. 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

# 7 Claims

A hydrathe sheat to, cutting continuously cast billets, comprising a lower frame member, a top frame member supported by the lower frame member, a top blade holder extending downwardly from and supported by the top member, a lower blade holder extending upwardly from the lower frame member and supported on the ram of a hydraulic cylinder, shearing or cutting blades mounted in the said blade holders, the hydraulic cylinder being mounted below the lower frame mender and adapted to force the lower blade holder and the lower shearing blade upwardly, means for supplying and discharging hydraulic fluid to and from the hydraulic cylinder and means for couring travel of the hydraulic shear along with the billet and for the operation of the hydraulic shear to its normal position after the cutting of the billet.

Complete speen, 9 pages.

Drg. 2 sheets.

CLASS: 150C

155152

Int. Cl.: F 161 25|00.

PIPE COUPLINGS.

Applicant: MICHAEL JOHN POOK OF C-4, COMMERCIAL ARFA, SAFDARJUNG DEVELOPMENT AREA, NEW DELHI-110016, INDIA BRITISH NATIONAL.

Inventor: MICHAEL JOHN POOK.

Application for Patent No. 889 Del 80 filed on 12th December, 1980

Appropriate office for apposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

# 8 Claims

A pipe coupling to pipes conveying fluids, such as water, comprising a tubular housing or sleeve, a ring around said tubular housing pivoted to the housing by two diametrically opposed puis, at least two latch members pivoted on the ring remote from the tubular housing, said tubular housing being adapted to recieve one end of a first pipe, a second ring adapted to be fitted around a second pipe the end of which is adapted to be received within said tubular housing, the tubular housing being enlarged over part of its length on one side and is provided with an internal groove for receiving and housing a sealing ring which is adapted to surround the end of the second pipe inserted in the housing,

the second ring having eatch members for engagement the remote ends of the said latch members, springs for holding the latch members in their position engaging the said catch members, the plane passing through the axes of the pivots of the latch members being at right angles to the plane passing through the axes of the pivot pins of the said

Compl. specn. 9 pages.

Drg. 1 sheet.

CLASS: 150C

155153

Int. Cl.: F|61 25|00.

PIPE COUPLINGS.

Applicant: MICHAEL JOHN POOK, OF C-4 COMMERCIAL AREA, SAFDARJUNG DEVELOPMENT AREA, NEW DFLHI-110016, INDIA, A BRITISH NATIONAL.

Inventor: MICHALL JOHN POOK.

Application for Patent No. 890 Del 80 filed on 12th Decem-

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 9 Claims

A pipe coupling for pipes conveying fluids such as water comprising a tubular housing or sleeve which is enlarged over part of its length on one side and provided with an internal groove for receiving and housing a sealing ring, and which is adapted to receive the end of a pipe around and which is adapted to receive the end of a pipe around it on its other side, a first ring fixed around the enlarged portion of the tubular housing, a second metal ring fixed around a second pipe adjacent to the end of the pipe, a third metal ring pivoted on diametrically opposite sides on the said second ring, at least two latch members symmetrically spaced and pivoted to the said hird third the first saids of the latch members being adopted latch members symmetrically spaced and pivoted to the said third ring the free ends of the latch members being adapted to be engaged with catch members on the said first ring, springs for holding the latch members engaged with the catch members, the plane passing through the axes of the pivots of the latch members being at right angles to the plane passing through the axes of the pins pivoting the said third ring around the said second ring, the said sealing ring surrounding the end of the second pipe when inserted into the tubular housing.

Compl specn. 9 pages.

Drg. 1 sheet.

CLASS: 128P

155154

Int. Cl.: A 61f 1 00.

A PROSTHESIS FOR USE BY AN ABOVE KNEE AMPUTEE.

Applicant: THE DIRECTOR, ALL INDIA INSTITUTE OF MEDICAL SCIENCES, ANSARI NAGAR, NEW DELHI-110016, INDIA, AN INDIAN NATIONAL.

Inventors: SUDARSHAN KUMAR VARMA, SAGAN HASAN MULIA.

Application for Patent No. 892 Del 80 filed on 12th December, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rulès, 1972) Patent Office Branch, New Delhi-110005.

# 5 Claims

A prosthesis for an above knee amputee comprising A prostness for an above knee amputee comprising a thigh piece having a socket member adapted to receive the stump of a patient, a shank connected at the proximal end to said thigh piece through a knee joint assembly capable of having an angular movement along the vertical plane, said shank having a distell end connected to or integrally provided with a foot ankle assembly characterized in that

said knee joint assembly consists of a tubular member extending into a pair of spaced arms, said spaced arms provided with a hole or opening for receiving a knee axle to be rotatably fixed therein by means of check nuts, said knee axle being fixed to a joint member which is provided with the said thigh piece in which the said hole or opening is provided disposed away from the central vertical plane of said prosthesis.

Compl. specn. 21 pages.

Drg. 4 sheets.

CLASS: 128 B

155155

Int. Cl.: A61f 1 00.

A CONNECTOR MEMBER FOR USE IN A PROSTHE-SIS.

Applicant: THE DIRECTOR, ALL INDIA INSTITUTE of MEDICAL SCIENCES, ANSARI NAGAR, NEW DELHI-110016. INDIA AN INDIAN NATIONAL.

Inventors: SUDARSHAN KUMAR VARMA, SUJOY KUMAR GUHA SAGAN HASAN MULLA, & KRISHAN KUMAR CHAUDHARY.

Application for Patent No. 893 Del 1980 filed on 12th December, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-

### 5 Claims

A connector member for a prosthesis for use by an above knee amputee, said prosthesis consisting of a thigh piece with a socket, a shank connected to said thigh piece through a knee joint assembly, the distal end of said shank connected to an ankle assembly is characterized in that said connecting the provided between said thick piece conditions. member is provided between said thigh piece and said shank capable of imparing a deflection to said shank along the sagittal plane which comprises a connector element having a head member with a centrally located depending hollow shaft, the base of said shaft having a coil spring and a washer ring held to the outer surface of said shaft, an a washer ring held to the outer surface of said shaft, an intermediate spacer held to said washer ring, an annular ring provided surrounding said spacer and having an upwardly extending arcuate member provided with a hump, said hump having a slot with a pin provided therein, said head member further provided with a slot accomodating a spring loaded pin capable of being actuated by the said pin provided in the slot of the said hump such that an inward displacement of the said spring loaded pin into the head member actuated by the pin provided within the slot of the said hump a locking of the rotational movement of the said connector element is effected. connector element is effected.

Complete specn. 12 pages.

Drg. 2 sheets.

CLASS: 128B

155156

Int. Cl.: A61f 1]00.

AN ANKLE JOINT MI-MBER FOR USE IN A PROSTHESIS.

Applicant: THE DIRECTOR, ALL INDIA INSTITUTE OF MEDICAL SCIENCES, ANSARI NAGAR, NEW DELHI-110016, INDIA, AN INDIAN NATIONAL.

Inventors: SUDARSHAN KUMAR VARMA AND SAGAN HASAN MULLA.

Application for Patent. No. 894|Del|80 filed on 12th December, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 7 Claims

An ankle joint member for a prosthesis for use by an above knee amputee, said prosthesis consisting of a thigh piece with a socket, a shank connected to said thigh piece through a knee joint assembly the distal end of said shank connected to an ankle joint member characterised in that said ankle joint member comprises an ankle plate held to a foot piece, a housing pivotally supported on said ankle plate through a pivotal joint, said housing having a rotatable plate, a connecting lever connected at one end to said totatable plate and at the opposite end to said thigh piece a finger turther connected at one end with said rotatable plate, the bisal end of said linger being pivotally held to said ankle plate such that a linear displacement of said connecting lever causes a pivotal movement or said toot piece

Compl Specn 11 pages

Dig 2 sheets

CLASS 128 B

155157

Int Cl A61f-1|00

A PROSTHESIS FOR USF BY A BELOW KNEE AMPUTFE

Applicant THE DIRECTOR, ALL INDIA INSTITUTE OF MEDICAL SCILNCES, ANSARI NAGAR, NEW DELHI 110016, INDIA, AN INDIAN NATIONAL

Inventors SUD ARSHAN KUMAR VARMA, SAGAN HASAN MULLA & HERFIRTH SINGH

Application for Latent No.  $895_{\parallel}Del|1980$  filed on 12th December, 1980

Complete specification left on 11th March 1982

Appropriate office 101 opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, New Delhi 110005

# 2 Claims

A prostliest for use by a oclow knee amputee comprising or a socket held to a foot ankle assembly through a shimk characterised in that there is provided a suspension strap prototally held to the upper end of said socket said suspension strap connected to a pelvis strap through a connecting strap an intermediate strap provided between said suspension and pelvis strap an actuator chord connected to said suspension strap while the other end being held to the foot ankle assembly such that a privotal actuation to said foot ankle assembly is imparted through said actuator chord

Provisional speci 5 pages

Drg 1 sheet

Compl speen & pages

Dig 1 sheet

CLASS 32I (t) 55E.

CLASS  $32F_2(t_1)$   $55E_t$ 

155158

A PROCESS FOR THE PRIPARATION OF A SUSTAINED RELEASE FORMULATION CONTAINING DIPYRIDAMOLE

Applicant DR KARI THOMAE GESELLSCHAFT MIT BESCHARLIER HAFTUNG, OF BIBERACH AN DER RISS, FEDLRAI REPUBLIC OF GERMANY, A GERMAN COMPANY

Inventors PLIER GRUBER, ROLF BRICKL HERBERT STRICKER AND GERHARD BOZLER

Application for Patent No 896 Del 80 filed on 12th December, 1980

pprofit the office for opposition proceedings (Rule 1, Patent, Rules 1972) Patent Office Branch New Delhi-110005.

#### 7 Claims

A process for the preparation of a sustained release formulation conturing dipartenance ing a plurifity of spheroidal cores or a saft thereof and a physiologically compatible acid substance to 1 mot of dipartdamole of a saft thereof and coating said cores with a coating whereby spheroidal particles are obtained the said coatile comprising from 100 to 50% by weight of and dissoluble lacquer soluble in intestinal jurices and from 0 to 50% by weight of and dissoluble lacquer soluble in intestinal jurices and intestinal pieces with the proviso that where the lacquer insoluble in a tire and intestinal jurices comprises ethyl collubose the weight of ethyl cellulose present does not exceed 14% of the total weight of the conting

Compl Speen 29 pages

Dig 6 pages

CLASS 85 H

155159

Int Cl F27b 1 00.

CRACK I KEI LIME KILNS OF THE VERTICAL MASONRY SHAFT TYLE

Applicant ALI AHMED ANSARI CENTRAL BUILDING RESI ARCH INSTITUTE ROORKEE (U.P.), INDIA, INDIAN BY BIRTH AND DOMICIE

Inventor ALI AHMAD ANSARI

Application for Patent No 910 Deli80 filed on 231d December, 1980

Complete specification left on 1st September, 1981

Appropriate office for opposition proceedings (Rule 4 Patent, Rules 1972) Letent Office Branch New Delhi-110005

# 7 Claims

Veracle free lite little in the vertical masenary shaft type vine cin a field little lining is provided on the inner side and ordinary masonity on the outer side there are further provided vertical and hori ontal expansion joints being incorporated in the kim wall and dividing the said wall into panels said panels being enclosed in a framework of columns and rings pliced along the peripheral edges of the said expansion joints but separated therefrom by expansion gaps

I rovis onal specification 4 pages

Compl speen 12 pages

Dig 2 sheets

(LASS 551 · 189

155160

Int Cl Af II 7 00

DINIAL CREAM COMPOSITION

Applicant COLGATE PALMOI IVE COMPANY, OF 300 PARI, AVINUE NEW YORK 10022 UNITED STATES OF AMERICA A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA

Inventors HENDRIK FRANS WEYN, ERIC BAINES AND KINNETH HARVLY

Application for Patent No 919 Del 80 filed on 29th December 1980

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch New Delhi 110005.

# 7 Claims

A dental cicim composition comprising a dental vehicle, i bin my fluorine providing system from sedium monofluorophosphate and sodium fluoride and intimately dispersed in

said vehicle, and in direct contact with said binary fluorine-providing system components 20-75% by weight of a dentally acceptable water-insoluble polishing material consisting essentially of disalium phosphate characterized in that said binary funorine providing system provides 1000-1670 ppm fluorine from said sodium phosphate and said sodium fluoride provides 30-35′ by weight of the fluorine in amount of 300-580 ppm.

Complete Specn. 20 pages.

CLASS: 95H, 85J

155161

Int. Cl.: B21d 19|00, 39|00.

IMPROVED TUBING EXPANDER FOR BOILER TUBES OR THE LIKE.

Applicant: DRESSER INDUSTRIES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATES OF DELAWARF, ONE OF THE UNITED STATES OF AMERICA, OF THE DRESSER BUILDING, PO BOX 718, DAI LAS, TEXAS 75221, UNITED STATES OF AMERICA. MANUFACTURERS.

Inventor: PAUL WARREN MARTIN.

Application for Patent No 920 Del 80 filed on 29th December, 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

### 7 Claims

An improved tubing expander for expanding tubing into tight, scaling engagement, with a tube sheet or the like and flaving the ends of such tubing projecting from the tube sheet, the expander comprising:

an elongated mandrel having a tapered portion thereon; an annular expander cage encircling a portion of said mandrel, said expander having a plurality of spaced slots therein:

a plurality of generally straight expander rolls disposed in some of said slots;

a plurality of tapered flare rolls disposed in the other of said slots;

a hollow thrust member encircling a portion of said cage and mandrel and having an end engageable with the tube sheet; and

a stop member mounted on said cage within said thrust number and engageable with said thrust member to limit the axial movement of said cage relative to said thrust member thereby controlling the depth of entry of the rolls into said tubing and the maximum flare of the tube ends.

Compl. specn. 9 pages. Drg. one sheet.

# PATENTS SEALED

139048 145237 145238 145269 145308 145315 145375 145387 145398 145402 145434 145437 145438 145450 145451 145452 148139 151137 152171 152403 152412 152413 152446 152496 152497 152511 152529 152531 152532 152534 152535 152570 152572

# RENEWAL FEES PAID

 124269
 124270
 124432
 124450
 124545
 124568
 124626
 125038

 125068
 125298
 125865
 126117
 126176
 129587
 133925
 134016

 134072
 134077
 134100
 134288
 136129
 136330
 136375
 136508

 136929
 137020
 137264
 137661
 137687
 137858
 137937
 137939

 137996
 138096
 138216
 138235
 138238
 138239
 138749
 139201

 139831
 140223
 140276
 140501
 140728
 140813
 140868
 140896

 140897
 140950
 140961
 140964
 140987
 141057
 141246
 141689

 141983
 142080
 142255
 142256
 142354
 142576
 142610
 142732

 142768
 143022
 143227
 143372
 143590
 143604
 143747
 143791

 144084
 144272
 144352
 144375
 144376
 144434
 144469
 144675

 144768
 144905
 145028
 145168
 145293
 145446
 145448
 145850

 145982
 146438
 146554
 146608
 146770
 146794
 147052
 147336

 147697
 147698
 147699
 147700
 147716
 148028
 148183
 148184

 148210
 148229
 148295
 148406
 148898
 149260
 149573
 149606

 149630
 149758
 149759
 149859
 150328
 150376
 150640
 150715

 150739
 150744
 150768
 150802
 150879
 150897
 150901
 150930

 151028
 151111
 151169
 151241
 151792
 151926
 151944
 151961

 151996
 152006
 152029
 <td

# REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the resign included in the entry.

- Class. 1. No. 154375. The General Electric Company of India Limited, of Magnet House, 6, Chittaranjan Avenue Calcutta-700 072, West Bengal, India, an Indian Company. "an Impeller". 2nd, 1984.
- Class. 1. No. 154790. L. G. Balakrishnan & Bros. Limited.
  Transport House, Karur 639 002, Tamil Nadu,
  India a company duly organised and existing
  under the laws of the Union of India. "a window
  shutter frame for a bus". 5th September, 1984.
- Class. 1. No. 154791. L. G. Balakrishnan & Bros. Limited,
  Transport House, Karur 639 002 Tamil Nadu
  India, a company duly organised and existing
  under the laws of the Union of India. "a tail
  lamp for a bus". 5th September, 1984.
- Class. 3. No. 154936. 'Plastica' a Manufacturer carrying on business at 94, Vithalwadi, Kalbadevi Road, Bombay 2 Maharashtra State, an Indian Partnership concern." "Shopping Baskets". 9th October 1984.
- Class. 3. No. 154803. 'Shaligram Plastics, Ramlaxman Tanning Compound, Kattawadi, Sharavi Cross Road, Bombay-400017, Maharashtra State on Indian Partnership Fire. Stationery Box".
- Class. 3. No. 154650. N. R. Dongre, Director, Usha Intercontinental (Pro. General Sales Private Limited) 8-Malcha Market, New Delhi-110021, India, An Indian Company. "Sewing machine table". 31st July, 1984.
- Class. 3. No. 154811. Tobu Enterprises Private Limited, 8]
  29. Kirti Nagar Industrial Area. New Delhi110015, India, An Indian Company. "Briefcase".
  10th September, 1984.
- Class. 3. No. 154531. The parker pen Company, a company organized and existing under the laws of the State of Delaware, United States of America, of America, of One Parker Place, Janeshville, Wisconsin 53545 United States of America. "A Writing Instrument" 21st June, 1984.
- Class. 3. No. 154725. Milton Plastics, a registered Indian Partnership Firm, registered under the Indian Partnership Act, 1932, having Office at 202|203, Raheja Centre, 214, Nariman Point Bombay 400 021 Maharashtra India. "School Box". 22nd August, 1984.
- Class. 3. No. 154869. Paman Products Private Limited, having its registered office at 205-A, Hiran Industrial Estate, Mogul Lane, Mahim, Bombay 400-016 Maharashtra, India an Indian company incorporated under the companies Act. "Tape Recorder cum Radio". 21st September, 1984.

- Class 3 No 154860 Paman Products Private Limited, having its registered office at 205 A, Hiran Indus trial Estate, Mogul I me, Mahim Bombay 400 016 Maharashti i, India, an Indian company Radio 21st Septemb i 1984
- Class 3 No 154861 Paman Products Private Limited, having its registered office at 205 A, Hiran Industrial Estate Mosal Lane Mahim Bombay 400 016 Maharashtia India an Indian company Radio 21st September 1984
- Class 3 No 154726 Milton relatives a registered Indian Partnership Firm registered under the Indian Partnership Act 1932 having officer at 202/203, Rabeja Centre 214, Nariman Point, Bombay-400021, Maharashtra India, 'Insulated Tiffin Carital 22nd August 1984
- Class 3 No 154830 Milton Plastics, a registered Partnership Firm having Office at 202 203 Raheja Centre, 214, Narimin Point Bombay 400 021 Maharishti India Buck t 15th September 1984
- Class 3 No 155059 Sunshme Cosmetics Manufacturers, 15 B Shalimai Industrial Estate, Matunga Labour Camp Kolwada Bombay 400,019 State of Maharashtra an Indian Sole proprietory Firm Container 15th November 1984

- Class 4 No 154170 Hindustan Vacuum Glass Limited, A Company incorporated under the Indian Companies Act N I T Faridabad Haryana India Flask 14th Maich, 1984.
- Class 4 No. 154171 Himmistan Vacuum Glass Limited, A Company incorporated under the Indian Companies Act. N. I. F. Faud ibad. Haryana. India. Flask. 14th. M. u.ch., 1984
- Class 4 No 154172 Hindustan Vacuum Glass Limited, A Company incorporated under the Indian Companies Act N I T Faildabad Haryana India Flask 14th Much 1984
- Class 4 Nos 154173 154174, 154175-same as above
- FXTN OF COPYRIGHT FOR THI SECOND PERIOD OF FIVE YEARS

  Nos 149021, 154514 Class 1

  Nos 149063, 149099 148808 Class 3

  No 149423 Class 1

  No 150751 Class 1
- EXTN OI COPYRIGHT FOR THE THIRD PERIOD OF FIVE YEARS

  Nos 154514, 142251—Class 1

  No 150751—Class 11

R A ACHARYA
of Patents, Designs
and Trade Marks